TOSHIBA

FILE NO. 030-200419
REVISED.1

SERVICE MANUAL

Projection Television

46WM48P

Published in Japan, Dec. 2004 (YC)

TABLE OF CONTENTS

CHAPTER 1 **GENERAL ADJUSTMENTS**

SAFETY INSTRUCTIONS 3

SERVICE MODE 4

DESIGN MODE 7

CHAPTER 2 **SPECIFIC INFORMATIONS**

SETTING & ADJUSTING DATA 9

LOCATION OF CONTROLS 10

Tuning the television using Quick setup, Programme sorting 12

LAMP UNIT REPLACEMENT 13

LIGHT ENGINE REPLACEMANT 15

PARTS REPLACEMENT IN LIGHT ENGINE 17

EXPLODED VIEW 19

MECHANICAL DISASSEMBLY 20

CHASSIS REPLACEMENT PARTS LIST 21

PC BOARDS TOP AND BOTTOM VIEW 30

SCHEMATIC DIAGRAM 42

CIRCUIT BLOCK DIAGRAM 44

SPECIFICATIONS ..... END

APPENDIX:

CIRCUIT DIAGRAM

CHAPTER 1 GENERAL ADJUSTMENTS

SAFETY INSTRUCTIONS

SAFETY PRECAUTION

WARNING: Service should not be attempted by anyone unfamiliar with the necessary precautions on this receiver. The following are the necessary precautions to be observed before servicing this chassis.

1. An isolation transformer should be connected in the power line between the receiver and the AC line before any service is performed on the receiver.
2. When the replacing a chassis in the cabinet, always be certain that all the prospective devices are put back in place, such as; non-metallic control knobs,insulating covers, shields, isolation resistor-capacitor network etc.

PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in this chassis have special safety-related characteristics. These characteristics are often passed unnoticed by a visual inspection and the protection afforded by them cannot necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this manual and its supplements; electrical components having such features are identified by the international hazard symbols on the schematic diagram and the parts list.
Before replacing any of these components, read the parts list in this manual carefully. The use of substitute replacement parts which do not have the same safety character istics as specified in the parts list may create shock, fire, or other hazards.

SERVICE MODE

1. ENTERING TO SERVICE MODE

1) Press 🔇 button once on Remote Control.

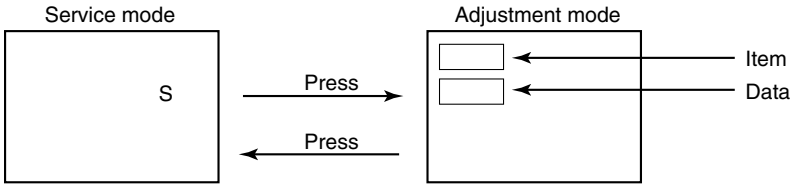
2) Press 🔇 button again to keep pressing.

3) While pressing the 🔇 button, press MENU button on TV set.

(Service mode display)

2. DISPLAYING THE ADJUSTMENT MENU

1) Press MENU button on TV.



3. KEY FUNCTION IN THE SERVICE MODE

The following key entry during display of adjustment menu provides special functions.

Test signal selection :	⊕ button (on Remote)
Selection of the adjustment items :	Channel ▲/▼ (on TV or Remote)
Change of the data value :	Volume +/– (on TV or Remote)
Adjustment menu mode ON/OFF :	MENU button (on TV)
Initialization of the memory (QA02) :	CALL + Channel button on TV (▲)
Reset the count of operating protect circuit to “00”:	CALL + Channel button on TV (▼)
“RCUT” selection :	1 button
“GCUT” selection :	2 button
“BCUT” selection :	3 button
Self diagnostic display ON/OFF :	9 button

CAUTION : Never try to perform initialization unless you have changed the memory IC.

4. SELECTING THE ADJUSTING ITEMS

1) Every pressing of CHANNEL ▲ button in the service mode changes the adjustment items in the order of table-2. (▼ button for reverse order)

Refer to table-2 for preset data of adjustment mode.
(See SETTING & ADJUSTING DATA on page 27)

5. ADJUSTING THE DATA

1) Pressing of VOLUME +/– button will change the value of data in the range from 00H to FFH. The variable range depends on the adjusting item.

6. EXIT FROM SERVICE MODE

1) Pressing POWER button to turn off the TV once.

■ **INITIALIZATION OF MEMORY DATA OF QA02**

After replacing QA02, the following initialization is required.

1. Enter the service mode, then select any register item.
2. Press and hold the CALL button on the Remote, then press the CHANNEL ▲ button on the TV. The initialization of QA02 has been complated.
3. Check the picture carefully. If necessary, adjust any adjustment item above. Perform “Auto tune” on the owner’s manual.

CAUTION: Never attempt to initialize the data unless QA02 has been replaced.

7. TEST SIGNAL SELECTION

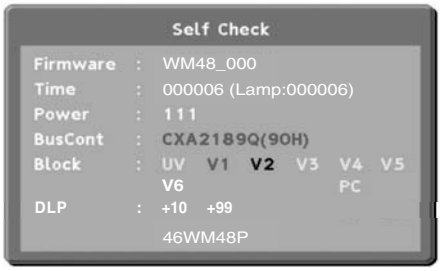
1) Every pressing of ⊕ button on the Remote Control changes the built-in test patterns on screen as described below in SERVICE MODE.

Signal off ⟷ ALL Red ⟷ ALL Green ⟷ ALL Blue ⟷ ALL Black ⟷ ALL White ⟷

Signals	Picture
• All White • All Red • All Green • All Blue • All Black	

8. SELF DIAGNOSTIC FUNCTION

1) Press “9” button on Remote Control during display of adjustment menu in the service mode.
   The diagnosis will begin to check if interface among IC’s are executed properly.
2) During diagnosis, the following displays are shown.



① Firmware:
Version information of microprocessor
In case of file name : WM48 and Version : 1.00 indicates[WM48_100].

② Time: Total hour of turn the TV on. (Unit : H) ▪ Total hour of Lamp lights. (Unit : H)

③ Power : Operation number of protecting circuit ----"00" is normal.
When indication is other than "00", overcurrent apt to flow, and circuit parts may possibly be damaged.

④ BusCont : --- "OK" is normal.
When type name of semiconductor indicates.

⑤ BLOCK
UV : TV reception mode
V1 : VIDEO 1 input mode (→ 1)
V2 : VIDEO 2 input mode (→ 2)
V3 : VIDEO 3 input mode (→ 3)
V4 : VIDEO 4 input mode (→ 4)
V5 : VIDEO 5 input mode (→ 5)
V6 : HDMI input mode (HDMI)
PC : PC input mode (PC)

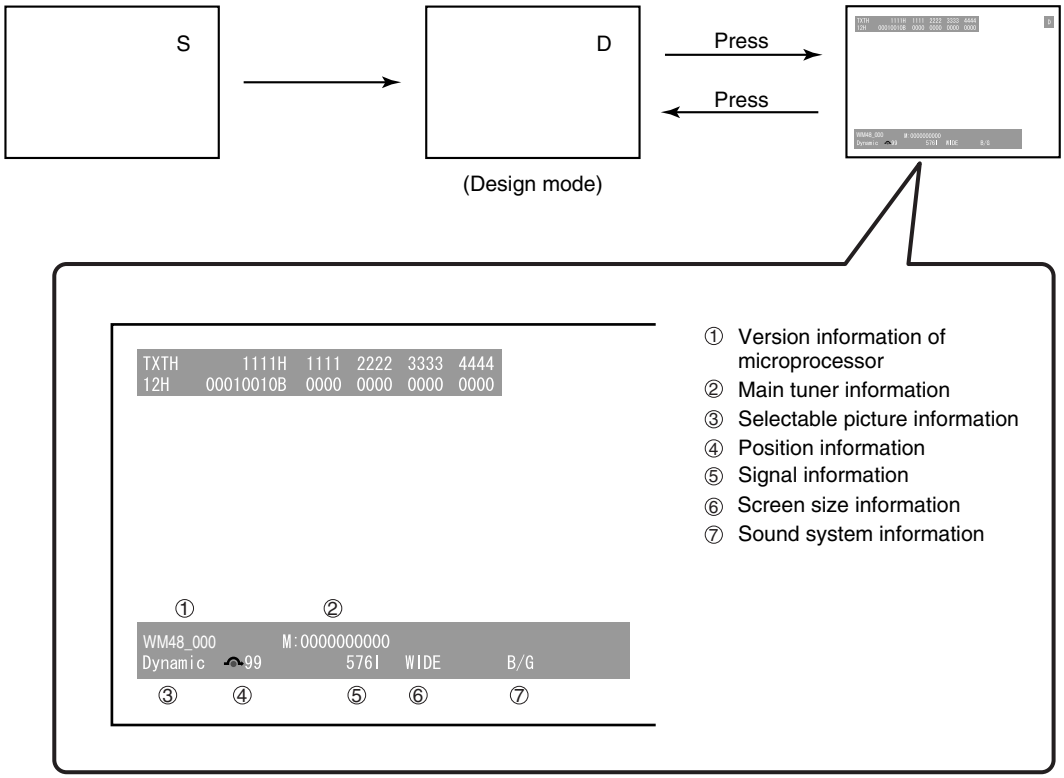
⑥ Temperature indication
+10 indicates temperature nearby the lamp unit
+99 indicates temperature nearby the light engine

⑦ Model name (7 digit)

DESIGN MODE

1. ENTERING TO DESIGN MODE

1) Select the Service mode. 2) While pressing CALL button on Remote and press MENU button on TV. 3) The following displays are shown on the screen



2. SELECTING THE ADJUSTING ITEMS

Every pressing of CHANNEL ▼ button in the design mode changes the adjustment items in the order of table-3. (▲ button for reverse order)

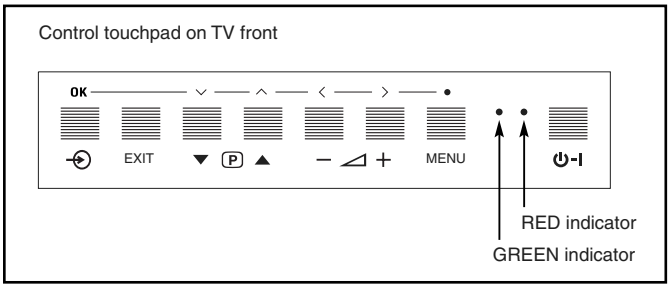
3. ADJUSTING THE DATA

Pressing of VOLUME ▲ or ▼ button will change the value of data.

4. LED indications

The green and red LED lights on the TV control touchpad (on the lower right Corner of the TV screen) indicate the TV's current status, as follows:

- Red ON (solid) and Green OFF = TV power cord is plugged in (the TV is ON or OFF).
- Green ON (solid) and Red OFF = The On timer is operating.
- Green and Red ON (solid) = TV front touchpad is being pressed.
- Green flashing (see table below for condition).



Priority	Problem	Green LED Operation
2	Abnormal operation (FAN stopped)	500ms ON, 500ms OFF
3	BUS line has failed. (IIC BUS error)	1sec ON, 1sec OFF
7	Lamp LPS (Low Power Standby) mode	(200ms ON · 200ms OFF)x1 Time, 1sec OFF
8	The lamp lights again.	(200ms ON · 200ms OFF)x2 Times, 1sec OFF
1	The lamp unit door is not closed properly.	(200ms ON · 200ms OFF)x3 Times, 1sec OFF
6	The lamp is not lightning properly.	(200ms ON · 200ms OFF)x4 Times, 1sec OFF
5	The color wheel has stopped, DMD bus error	(200ms ON · 200ms OFF)x5 Times, 1sec OFF
4	Temperature increases abnormally.	(200ms ON · 200ms OFF)x6 Times, 1sec OFF
Lowest	On timer set	ON

CHAPTER 2 SPECIFIC INFORMATIONS

SETTING & ADJUSTING DATA

【SERVICE MODE】

ADJUSTING ITEMS AND DATA IN THE SERVICE MODE:

	Item	Name of adjustment	Preset Deta	46WM48P
	RCUT	R CUT OFF	60H	←
	GCUT	G CUTOFF	60H	←
	BCUT	B CUT OFF	60H	←
	RDRV	R DRIVE	55H	←
	GDRV	G DRIVE	48H	←
	BDRV	B DRIVE	4BH	←
	HPOS	H.POSITION (PAL/WIDE)	00H	←
	VPOS	V.POSITION (PAL/WIDE)	00H	←
	CWDH	COLOR WHEEL DELAY (HIGH)	00H	←
	CWDL	COLOR WHEEL DELAY (LOW)	FAH	←
	DMDB	DMD BIAS	03H	←
	OPT0	TV SET OPTION 0	8CH	←
※	OPT1	TV SET OPTION 1	00H	←
	HOTE1	HOTEL MODE OPTION 1	00H	←
	HOTE2	HOTEL MODE OPTION 2	00H	←
	UOLX		75H	←

※ OPT1 should be set to "20H" for UK shipment model.

Table-1

Note:

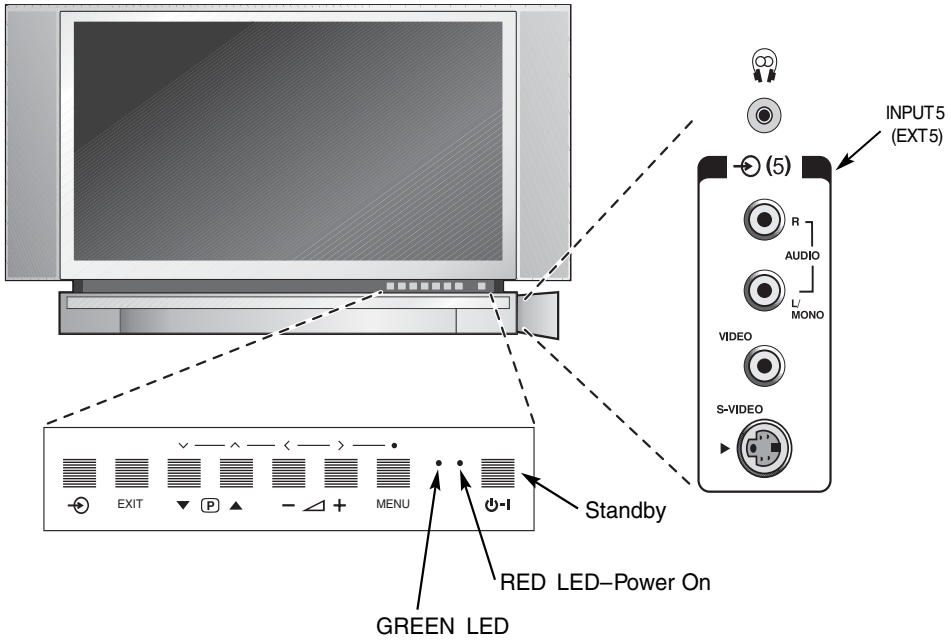
The image system data of RCUT-BDRV is different by each image format.

The PAL value is indicated in the table.

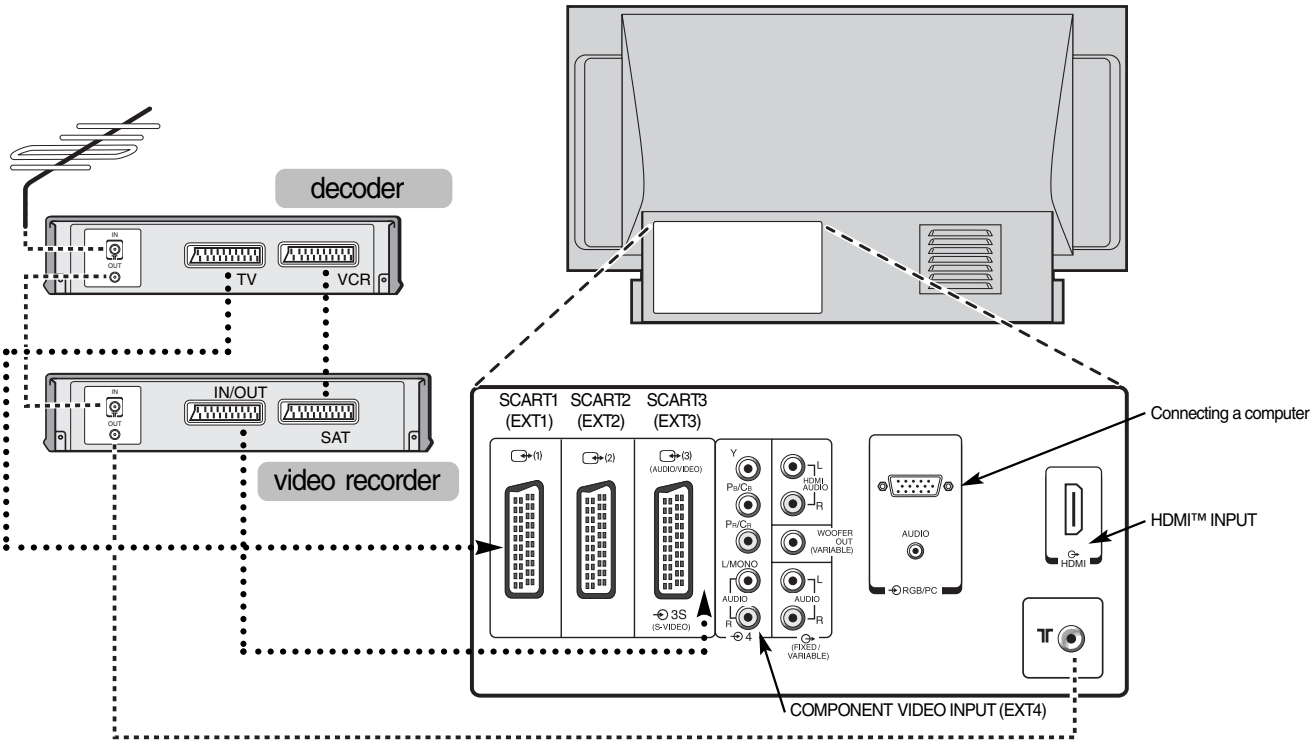
Never adjust H.POS and V.POS except PAL/WIDE mode.

LOCATION OF CONTROLS

Front



Back



Remote Control

Simple at-a-glance reference of your remote control.

To display teletext

To bring up on-screen information and for the teletext initial/index function

For On/Standby mode

Number buttons

To select input from external sources
To access sub-pages when in teletext mode

To return to the previous programme

Selectable picture preferences

Widescreen viewing

On-screen Menus

To exit Menus

To change programme positions and teletext pages
To alter the volume
When using menus the arrows move the cursor on the screen up, down, left or right. **OK** *to confirm your selection*

Teletext control buttons

Stereo/Bilingual reception

Bass Boost/Super Woofer

To select mode

To mute the sound

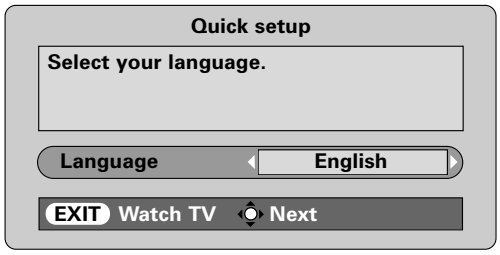
When using a TOSHIBA VCR or DVD:
press ⏸ to PAUSE
press ⏏ to EJECT
press ⏮ to SKIP-REWIND
press ⏭ to SKIP-FORWARD
press ▶ to PLAY
press ■ to STOP
press ◀◀ to REWIND
press ▶▶ to FAST FORWARD

When in TV mode:
Time display
When in Teletext mode:
To reveal concealed text
To hold a wanted page
To enlarge teletext display size
To select a page whilst viewing a normal picture

Tuning the television using Quick setup, Programme sorting

Before switching on the television put your decoder and video recorder (VCR) to **Standby** if they are connected. To set up the television use the buttons on the remote control as detailed on page11.

1 Connect the television to the mains power. The **Quick setup** screen will appear.



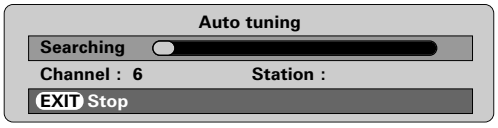
2 Using ❮ or ❯ select your **Language**, then press **OK**.

3 Then press ❮ or ❯ to select your **Country** and press **OK**.

4 Your **System** will have been selected, if there is a choice, press ❯ to select from the systems displayed.

B/G – Continental Europe, **I** – UK
D/K – Eastern Europe, **L1**, **L2** – France

5 To start **Auto tuning** press **OK**.



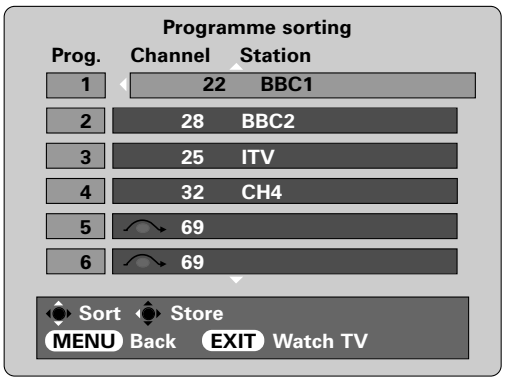
6 The search will begin for all available stations. The slide bar will move along the line as the search progresses.

You must allow the television to complete the search.

When the search is complete the television will automatically select programme position 1. This may not be a clear picture or the signal may be weak, so the station order can be changed using **Programme sorting** which will appear on the screen.

7 With the list of stations now showing use ❯ or ❮ to highlight the station you want to *move* and press ❯.

The selected station will be moved to the right of the screen.



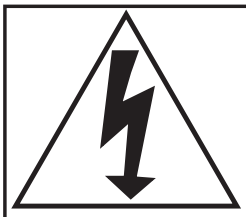
8 Use ❯ or ❮ to move through the list to your *preferred* position. As you do so the other stations will move to make room.

9 Press ❮ to store your move.

Repeat as necessary, then press **EXIT**.

If the television cannot be connected to a VCR/decoder with a SCART lead or if a station on another ***system*** is required, use **Manual tuning** to allocate a programme position.

WARNING



THE VOLTAGE INSIDE THIS PRODUCT MAY BE STRONG ENOUGH TO CAUSE AN ELECTRIC SHOCK

To reduce the risk of injury from electric shock never open or remove any of the television covers other than the Lamp Unit door. All other servicing should be carried out by qualified service personnel.

DO NOT TRY TO SERVICE THIS PRODUCT YOURSELF.

LAMP UNIT REPLACEMENT

The lamp has a limited service life which depends on the the amount of use and the settings used, so it has been designed for safe replacement by the consumer. The brightness of the lamp will vary during use and over time will gradually decrease. The strength of the quartz glass in the lamp will also reduce, this may cause the lamp to rupture, creating a loud noise and stopping the operation of the television. The lamp unit is designed so that the broken glass remains inside the replaceable unit. The lamp has reached the end of its service life when a reduction in colour and/or brightness is noticed or if the lamp ruptures.

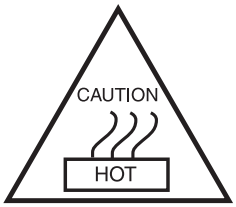
CAUTION: Always handle the lamp unit with care, keep away from children and pets. The unit has been designed so that the consumer can replace it but any misuse could result in the unit breaking exposing sharp edges and pinch points.

IMPORTANT SAFETY INSTRUCTIONS...

NEVER look directly at the lamp when lit as eye damage could result.

ALWAYS turn off the television by unplugging the mains lead before opening the lamp unit door.

The temperature of the lamp immediately after use exceeds 392°F/200°C. Allow the lamp to cool for at least 1 hour before replacing it, touching it before it has cooled will result in severe burns.



When replacing the lamp unit ALWAYS wear gloves to reduce the risk of burns.

The lamp unit door is provided with an interlock to reduce the risk of electric shock and excessive ultraviolet radiation. DO NOT attempt to replace the lamp unit without removing the lamp unit door completely, failure to do so could result in serious injury or death.

If the lamp unit glass is accidently touched or gets dirt on it, it can be gently wiped clean with a lint-free cleaning cloth such as a camera lens cloth or spectacles cloth.

NEVER clean the lamp with any type of flammable or aerosol cleaning liquid. Most household cleaning agents contain chemicals that are flammable at high temperatures.

To obtain a replacement lamp please contact your local Toshiba authorized dealer.

DISPOSAL...

The lamp in this television contains mercury, when the lamp unit and the television reaches the end of its useful life please dispose of it in accordance with Local Government Regulations or at a recycling centre.

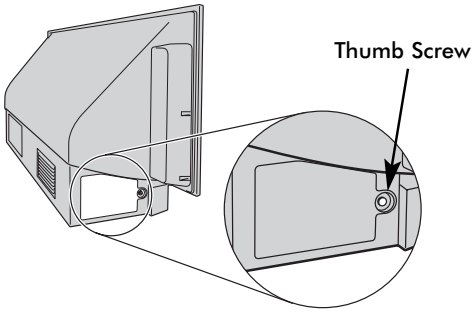
Replacing the Lamp unit

1 Turn off the television and remove the mains plug from the wall socket.

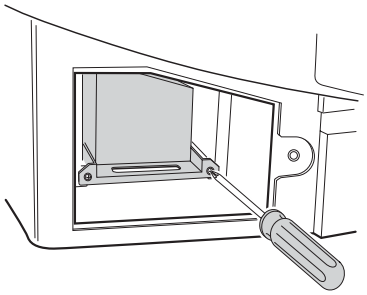
Allow the lamp to cool for at least 1 hour before replacing it.

Remember to wear gloves when replacing the lamp unit.

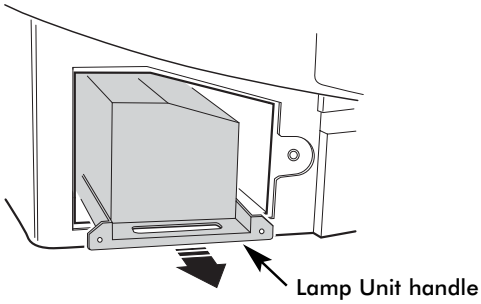
2 Undo the lamp unit door by loosening the thumb screw, then remove it by pulling the door outwards.



3 Using a manual Phillips hand screwdriver of suitable size, loosen the two screws on the bottom left and right of the lamp unit.



4 Using the lamp unit handle, gently pull the unit out of the television and put to one side.



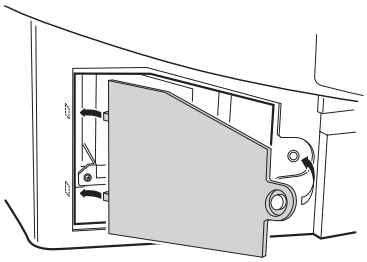
5 Carefully insert the new lamp unit into the television until it is fully seated.

NOTE:
Make sure that the lamp unit it not subjected to any knocks or bumps.

Never touch the lamp unit glass or allow it to get dirty. This may affect the picture quality and shorten the service life of the lamp.

6 Using the Phillips screwdriver tighten the two screws. Make sure that the screws are hand-tight only, do not use an electric screwdriver to avoid over-tightening.

7 Replace the lamp unit door by inserting the hooks on the left side of the door into the openings in the televisions cabinet.



8 Replace the thumb screw and hand-tighten.

9 Plug in the mains lead and take the television out of standby, the television may take a moment to come up to full brightness. The television should now operate normally.

If there is no picture, the picture is very dark or the television does not turn on, turn it back off and remove the plug from the mains power. Repeat steps 1 to 7 to ensure that the lamp unit has been installed correctly.

If the television still does not operate, make sure the television is unplugged and contact your Toshiba dealer.

Put the old lamp into the now empty lamp unit box and dispose of it according to local Government guidelines. Make sure it is out of reach of children and animals.

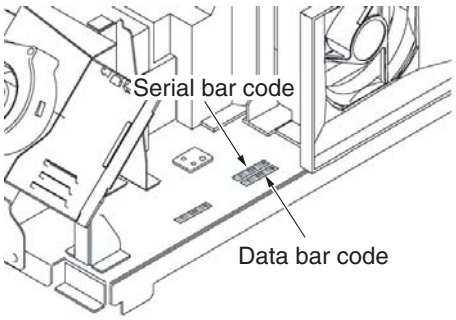
LIGHT ENGINE REPLACEMENT

Cautions when replacing LIGHT ENGINE

- LIGHT ENGINE is a heart of TV which emits high heat. Make sure to replace it after turning off the TV and wait for sufficient cool down. (More than one hour is recommended.)
- Do not add any impact during replacement; otherwise, some parts may be damaged.
- Do not touch any optical lens. Adhesion of dirt may deteriorate its performance.
- Do not loosen any screw other than those to be removed for adjustment or replacement.
- LIGHT ENGINE emits ultraviolet rays when the TV is ON. Make sure to be careful.

1. Replacement of Light Engine Unit

1-1. When Light Engine Unit is replaced with a new one, the adjustment is required. Adjusted values are described in bar code, and the values of bar code must be converted to the adjusted values for the setup. There are 2 types of bar code.



Serial bar code
Ex. 52A000A111111

Inch size — Serial numbers

Data bar code (CW: color wheel)
Ex. A111111B1111

CWdelay number: 4digits
DMD bias value
Substrate serial numbers

1-2. Adjustment is made by service mode. The adjusting items consist of CWDL, CWDH and DMDB.

CWDL CWDH

When CW delay number of the data bar code is 0450:

0450 indicates ⇒ 450 ⇒ 45.0
Double 45.0 to form hexadecimal number (HEX).

45.0 x 2=90 ⇒ 5A (hexadecimal)
The adjusted value becomes “5A” for CWDL and “00” for CWDH.
If hexadecimal number forms 3 or 4 digits, the latter 2 digits indicate CWDL while the first 2 digits indicate CWDH.
(For 3 digits, CWDH=0*)

Note:
For converting decimal number to hexadecimal number, see the conversion table on the next page.

DMDB

Read DMD bias value described in alphabet from the data bar code. In service mode, DMDB value is converted and fixed by the following table.

DMD value in bar code	Adjusted value (Hex)
B	00
C	01
D	02
E	03
F	04

Refer to Service Mode for adjusting the service mode.

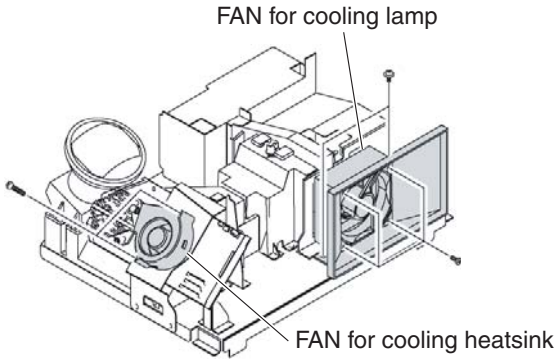
Conversion Table for Decimal and Hexadecimal Numbers

CW delay number	CWDH	CWDL
0000	00	00
0005	00	01
0010	00	02
0015	00	03
0020	00	04
0025	00	05
0030	00	06
0035	00	07
0040	00	08
0045	00	09
0050	00	0A
0055	00	0B
0060	00	0C
0065	00	0D
0070	00	0E
0075	00	0F
0080	00	10
0085	00	11
0090	00	12
0095	00	13
0100	00	14
0105	00	15
0110	00	16
0115	00	17
0120	00	18
0125	00	19
0130	00	1A
0135	00	1B
0140	00	1C
0145	00	1D
0150	00	1E
0155	00	1F
0160	00	20
0165	00	21
0170	00	22
0175	00	23
0180	00	24
0185	00	25
0190	00	26
0195	00	27
0200	00	28
0205	00	29
0210	00	2A
0215	00	2B
0220	00	2C
0225	00	2D
0230	00	2E
0235	00	2F
0240	00	30
0245	00	31
0250	00	32
0255	00	33
0260	00	34
0265	00	35
0270	00	36
0275	00	37
0280	00	38
0285	00	39
0290	00	3A
0295	00	3B
0300	00	3C
0305	00	3D
0310	00	3E
0315	00	3F
0320	00	40
0325	00	41
0330	00	42
0335	00	43
0340	00	44
0345	00	45
0350	00	46
0355	00	47
0360	00	48
0365	00	49
0370	00	4A
0375	00	4B
0380	00	4C
0385	00	4D
0390	00	4E
0395	00	4F
0400	00	50
0405	00	51
0410	00	52
0415	00	53
0420	00	54
0425	00	55
0430	00	56
0435	00	57
0440	00	58
0445	00	59
0450	00	5A
0455	00	5B
0460	00	5C
0465	00	5D
0470	00	5E
0475	00	5F
0480	00	60
0485	00	61
0490	00	62
0495	00	63
0500	00	64
0505	00	65
0510	00	66
0515	00	67
0520	00	68
0525	00	69
0530	00	6A
0535	00	6B
0540	00	6C
0545	00	6D
0550	00	6E
0555	00	6F
0560	00	70
0565	00	71
0570	00	72
0575	00	73
0580	00	74
0585	00	75
0590	00	76
0595	00	77
0600	00	78
0605	00	79
0610	00	7A
0615	00	7B
0620	00	7C
0625	00	7D
0630	00	7E
0635	00	7F
0640	00	80
0645	00	81
0650	00	82
0655	00	83
0660	00	84
0665	00	85
0670	00	86
0675	00	87
0680	00	88
0685	00	89
0690	00	8A
0695	00	8B
0700	00	8C
0705	00	8D
0710	00	8E
0715	00	8F
0720	00	90
0725	00	91
0730	00	92
0735	00	93
0740	00	94
0745	00	95
0750	00	96
0755	00	97
0760	00	98
0765	00	99
0770	00	9A
0775	00	9B
0780	00	9C
0785	00	9D
0790	00	9E
0795	00	9F
0800	00	A0
0805	00	A1
0810	00	A2
0815	00	A3
0820	00	A4
0825	00	A5
0830	00	A6
0835	00	A7
0840	00	A8
0845	00	A9
0850	00	AA
0855	00	AB
0860	00	AC
0865	00	AD
0870	00	AE
0875	00	AF
0880	00	B0
0885	00	B1
0890	00	B2
0895	00	B3
0900	00	B4
0905	00	B5
0910	00	B6
0915	00	B7
0920	00	B8
0925	00	B9
0930	00	BA
0935	00	BB
0940	00	BC
0945	00	BD
0950	00	BE
0955	00	BF
0960	00	C0
0965	00	C1
0970	00	C2
0975	00	C3
0980	00	C4
0985	00	C5
0990	00	C6
0995	00	C7
1000	00	C8
1005	00	C9
1010	00	CA
1015	00	CB
1020	00	CC
1025	00	CD
1030	00	CE
1035	00	CF
1040	00	D0
1045	00	D1
1050	00	D2
1055	00	D3
1060	00	D4
1065	00	D5
1070	00	D6
1075	00	D7
1080	00	D8
1085	00	D9
1090	00	DA
1095	00	DB
1100	00	DC
1105	00	DD
1110	00	DE
1115	00	DF
1120	00	E0
1125	00	E1
1130	00	E2
1135	00	E3
1140	00	E4
1145	00	E5
1150	00	E6
1155	00	E7
1160	00	E8
1165	00	E9
1170	00	EA
1175	00	EB
1180	00	EC
1185	00	ED
1190	00	EE
1195	00	EF
1200	00	F0
1205	00	F1
1210	00	F2
1215	00	F3
1220	00	F4
1225	00	F5
1230	00	F6
1235	00	F7
1240	00	F8
1245	00	F9
1250	00	FA
1255	00	FB
1260	00	FC
1265	00	FD
1270	00	FE
1275	00	FF
1280	01	00
1285	01	01
1290	01	02
1295	01	03
1300	01	04
1305	01	05
1310	01	06
1315	01	07
1320	01	08
1325	01	09
1330	01	0A
1335	01	0B
1340	01	0C
1345	01	0D
1350	01	0E
1355	01	0F
1360	01	10
1365	01	11
1370	01	12
1375	01	13
1380	01	14
1385	01	15
1390	01	16
1395	01	17
1400	01	18
1405	01	19
1410	01	1A
1415	01	1B
1420	01	1C
1425	01	1D
1430	01	1E
1435	01	1F
1440	01	20
1445	01	21
1450	01	22
1455	01	23
1460	01	24
1465	01	25
1470	01	26
1475	01	27
1480	01	28
1485	01	29
1490	01	2A
1495	01	2B
1500	01	2C
1505	01	2D
1510	01	2E
1515	01	2F
1520	01	30
1525	01	31
1530	01	32
1535	01	33
1540	01	34
1545	01	35
1550	01	36
1555	01	37
1560	01	38
1565	01	39
1570	01	3A
1575	01	3B
1580	01	3C
1585	01	3D
1590	01	3E
1595	01	3F
1600	01	40
1605	01	41
1610	01	42
1615	01	43
1620	01	44
1625	01	45
1630	01	46
1635	01	47
1640	01	48
1645	01	49
1650	01	4A
1655	01	4B
1660	01	4C
1665	01	4D
1670	01	4E
1675	01	4F
1680	01	50
1685	01	51
1690	01	52
1695	01	53
1700	01	54
1705	01	55
1710	01	56
1715	01	57
1720	01	58
1725	01	59
1730	01	5A
1735	01	5B
1740	01	5C
1745	01	5D
1750	01	5E
1755	01	5F
1760	01	60
1765	01	61
1770	01	62
1775	01	63
1780	01	64
1785	01	65
1790	01	66
1795	01	67

PARTS REPLACEMENT IN LIGHT ENGINE

1 FAN Replacement

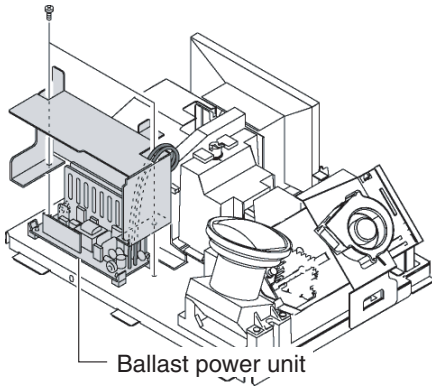
1-1. For replacing FAN for cooling heatsink, remove 2 screws.
For replacing FAN for cooling lamp, detach FAN hood located on LIGHT ENGINE by removing 2 screws and then remove 4 screws.



2. Replacement of Ballast Power Unit

2-1. Remove lamp unit by loosening 2 screws.
(Refer to pages 13 to 14)

2-2. Remove 2 screws holding chassis of ballast power unit to detach the chassis.
Note:
Treat with enough care so as not to damage the cable for lamp power.

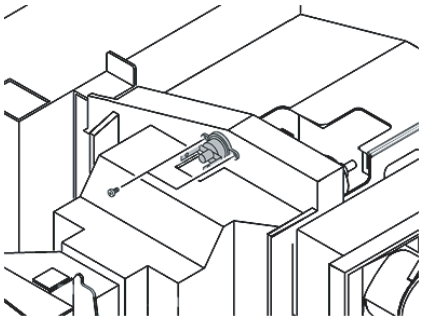


2-3. Detach the ballast power unit by removing 4 substrate stoppers that hold the ballast power unit.

CAUTION
Precautions When Exchanging Ballast Power Units
When you install a new ballast power unit, install it while pushing the four corners of the board directly. Installation while pressing the heatsink may cause the pattern crack.

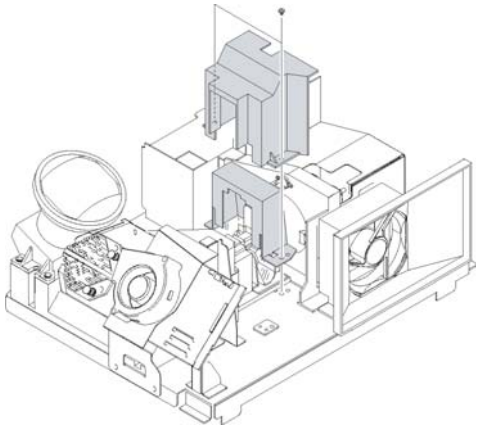
3. Replacement of Temperature Breaker

3-1. Remove 2 screws for replacing the temperature breaker for lamp.

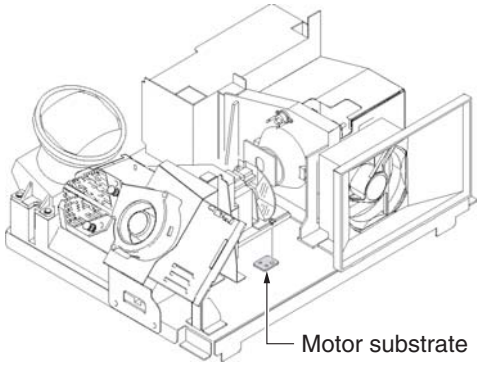


4 Replacement of Sensor Unit (Photo Detector Substrate) & Motor Unit (Motor Substrate)

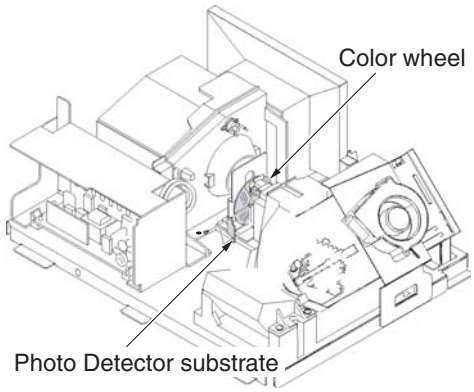
4-1. Remove 2 screws fixing a color wheel cover and UV filter box.



4-2. Remove one screw for motor unit.

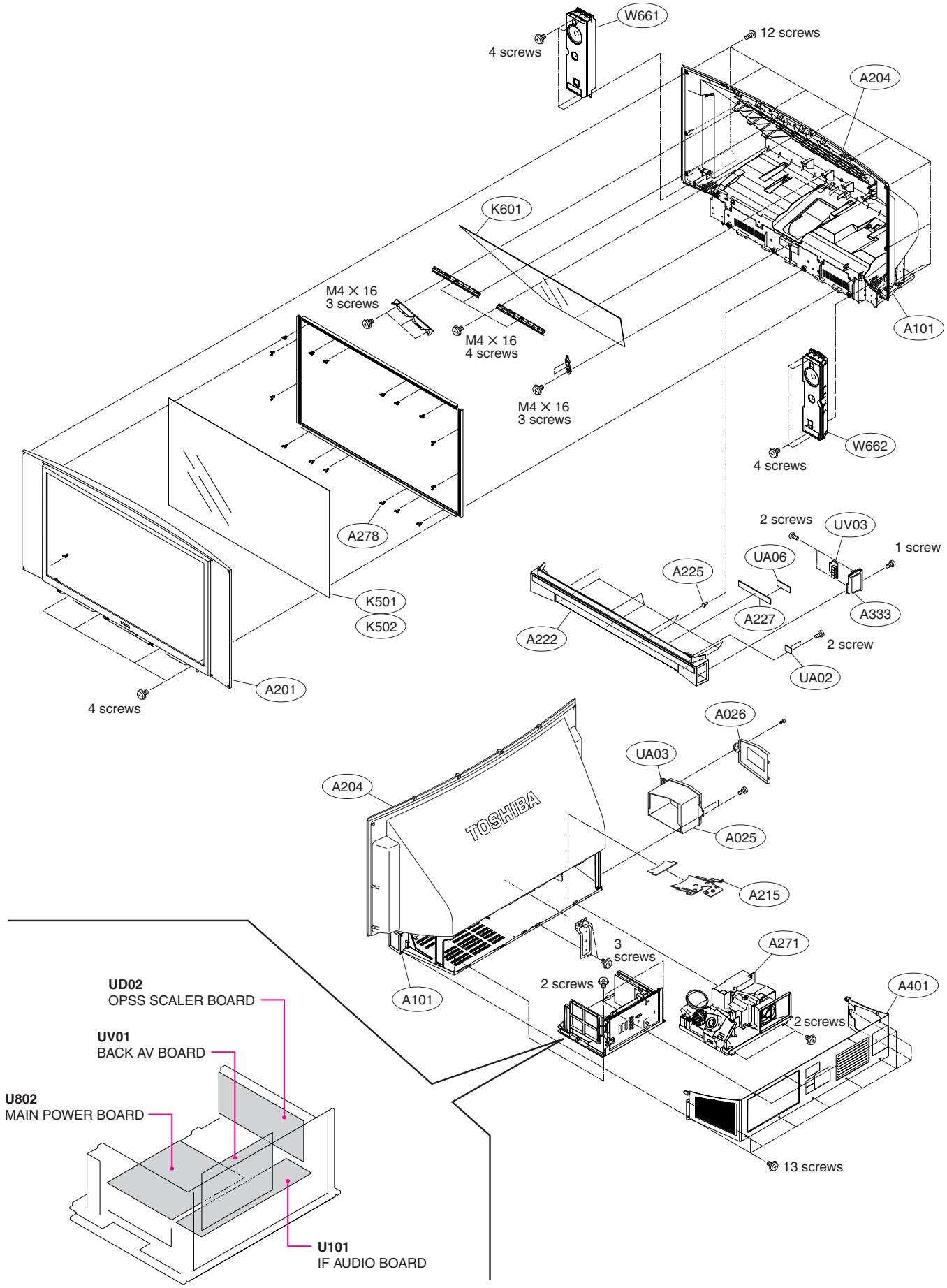


4-3. Remove 2 screws holding Photo Detector substrate.



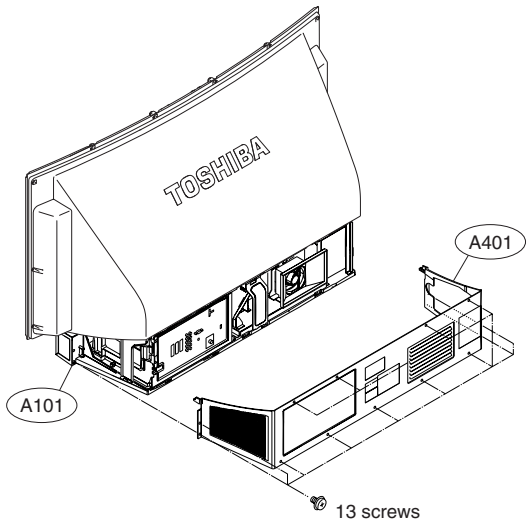
Caution
- When removing screws, do not damage the color wheel with drivers, etc. Even a small impact may damage the color wheel.
- Make sure not to touch the color wheel.
- Don't remove other screws by any means.

EXPLODED VIEW

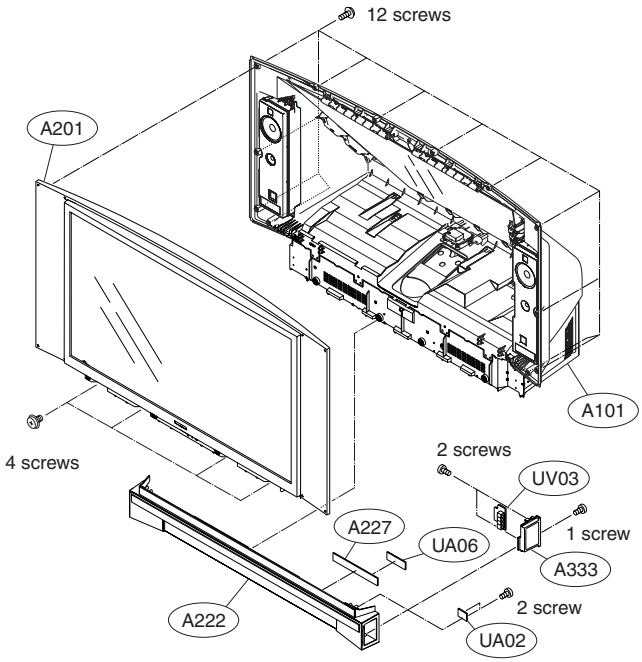


MECHANICAL DISASSEMBLY

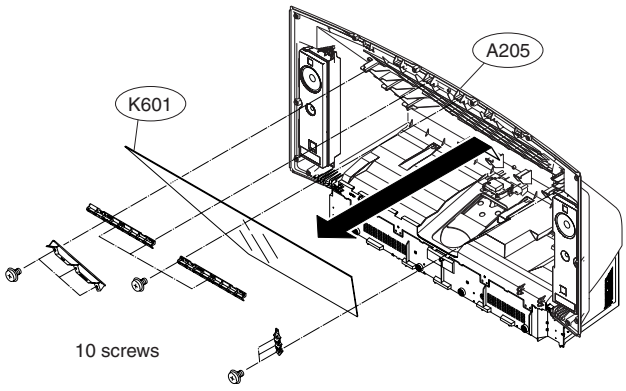
1 Rear Cover Removal



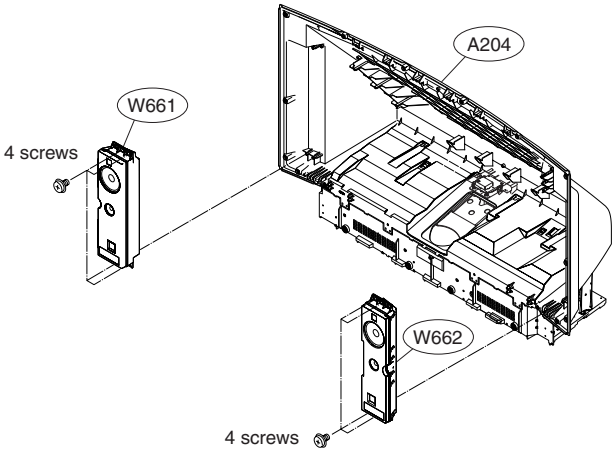
2 Touchpad & Bezel Ass'y Removal



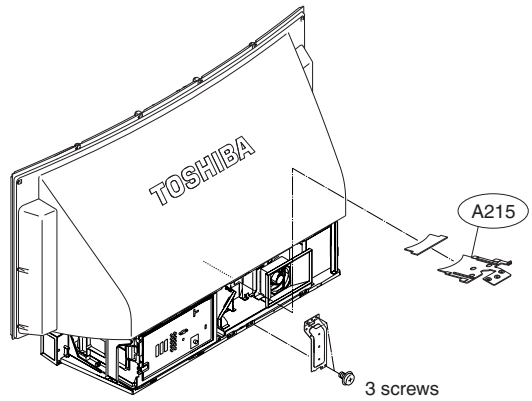
3 Mirror Removal



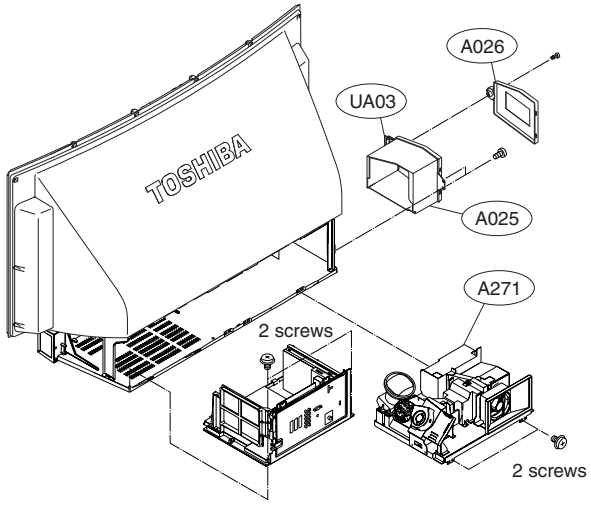
4 Speaker Removal



5 Bracket Removal



6 Optical Engine Removal



CHASSIS AND CABINET REPLACEMENT PARTS LIST

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE “SAFETY PRECAUTION” AND “PRODUCT SAFETY NOTICE” ON PAGE 3 OF THIS MANUAL.

CAUTION: The international hazard symbols "" in the schematic diagram and the parts list designate com-ponents which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. The mounting position of replacements is to be identical with originals. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE. Do not degrade the safety of the receiver through improper servicing.

NOTICE:

- *The part number must be used when ordering parts, in order to assist in processing, be sure to include the Model number and Description.*
- *The PC board assembly with * mark is no longer available after the end of the production.*

Model : 46WM48P

Capacitors	CD	:	Ceramic Disk	PF	:	Plastic Film	EL	: Electrolytic
Resistors	CF	:	Carbon Film	CC	:	Carbon Composition	MF	: Metal Film
	OMF	:	Oxide Metal Film	VR	:	Variable Resistor	FR	: Fusible Resistor

(All CD and PF capacitors are ±5%, 50V and all resistors, ±5%, 1/6W unless otherwise noted.)

Location No.	Parts No.	Description
CAPACITORS		
C101	24796479	ELECTROLYTIC, 35V 4.7UF M
C102	24793221	ELECTROLYTIC, 10V 220UF M
C103	24109103	CERAMIC CHIP, 50V B 0.01UF K
C105	24109102	CERAMIC CHIP, 50V B 1000PF K
C106	24797100	ELECTROLYTIC, 50V 10UF M
C107	24797101	ELECTROLYTIC, 50V 100UF M
C108	24793221	ELECTROLYTIC, 10V 220UF M
C109	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C111	24109103	CERAMIC CHIP, 50V B 0.01UF K
C118	24109102	CERAMIC CHIP, 50V B 1000PF K
C121	24794101	ELECTROLYTIC, 16V 100UF M
C122	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C271	24797229	ELECTROLYTIC, 50V 2.2UF M
C601	24797100	ELECTROLYTIC, 50V 10UF M
C602	24797100	ELECTROLYTIC, 50V 10UF M
C603	24591152	PLASTIC FILM, 50V 1500PF J
C604	24591152	PLASTIC FILM, 50V 1500PF J
C605	24073086	ELECTROLYTIC, 50V 10UF M 3A
C606	24073086	ELECTROLYTIC, 50V 10UF M 3A
C607	24073053	ELECTROLYTIC, 25V 100UF M 3A
C608	24073086	ELECTROLYTIC, 50V 10UF M 3A
C609	24797479	ELECTROLYTIC, 50V 4.7UF M
C610	24797479	ELECTROLYTIC, 50V 4.7UF M
C611	24105101	CERAMIC CHIP, 50V CH 100PF J
C612	24105101	CERAMIC CHIP, 50V CH 100PF J
C618	24797100	ELECTROLYTIC, 50V 10UF M
C619	24794471	ELECTROLYTIC, 16V 470UF M
C621	24797100	ELECTROLYTIC, 50V 10UF M
C622	24591103	PLASTIC FILM, 50V 0.01UF J
C624	24794101	ELECTROLYTIC, 16V 100UF M
C625	24794221	ELECTROIYTIC, 16V 220UF M
C651	24797229	ELECTROLYTIC, 50V 2.2UF M
C652	24797229	ELECTROLYTIC, 50V 2.2UF M
C653	24797229	ELECTROLYTIC, 50V 2.2UF M
C654	24797229	ELECTROLYTIC, 50V 2.2UF M
C655	24109102	CERAMIC CHIP, 50V B 1000PF K
C656	24109102	CERAMIC CHIP, 50V B 1000PF K
C659	24794101	ELECTROLYTIC, 16V 100UF M
C660	24794101	ELECTROLYTIC, 16V 100UF M
C661	24073042	ELECTROLYTIC, 16V 1000UF M 3A
C662	24797229	ELECTROLYTIC, 50V 2.2UF M
C680	24073058	ELECTROLYTIC, 25V 2200UF M 3A
C681	24109103	CERAMIC CHIP, 50V B 0.01UF K

Location No.	Parts No.	Description
C691	24794100	ELECTROLYTIC, 16V 10UF M
C692	24794100	ELECTROLYTIC, 16V 10UF M
⚠ C801	24503004	PLASTIC FILM, AC275V 0.47UF M
⚠ C803	24503002	PLASTIC FILM, AC275V 0.22UF M
C805	24092281	CERAMIC DISC, AC250V E 4700PF
C806	24092281	CERAMIC DISC, AC250V E 4700PF
C810	24086936	ELECTROLYTIC, 450V 270UF M 25F
⚠ C811	24092565	CERAMIC DISC, AC250V B 470PF K
⚠ C812	24092565	CERAMIC DISC, AC250V B 470PF K
C815	24092565	CERAMIC DISC, AC250V B 470PF K
C840	24073098	ELECTROLYTIC, 450V 4.7UF M 3A
C841	24073043	ELECTROLYTIC, 16V 2200UF M 3A
C842	24503041	PLASTIC FILM , 63V 0.1UF J
C843	24092333	CERAMIC DISC, 2KV 100PF K
C845	24073082	ELECTROLYTIC, 50V 2.2UF M 3A
C846	24503229	PLASTIC FILM, 1250VH 1000PF H
C847	24095634	PLASTIC FILM, 630V 0.01UF H
C848	24073039	ELECTROLYTIC, 16V 220UF M 3A
C850	24092341	CERAMIC DISC, 2KV R 470PF K
C851	24092341	CERAMIC DISC, 2KV R 470PF K
C861	24092342	CERAMIC DISC, 2KV R 560PF K
C862	24503045	PLASTIC FILM, 63V 0.22UF J
C863	24212221	CERAMIC DISC, 50V B 220PF K
C864	24590681	PLASTIC FILM CQ922M 50V 680PF J
C865	24073063	ELECTROLYTIC CE04P 35V 4.7UF M 3A
C866	24820223	PLASTIC FILM, 630V 0.022UF J
C868	24073068	ELECTROLYTIC, 35V 100UF M 3A
C883	24567104	PLASTIC FILM, 50V 0.1UF J
C884	24214331	CERAMIC DISC, 500V B 330PF K
C885	24073174	ELECTROLYTIC CE04P 25V 1500UF M 3A
C886	24214331	CERAMIC DISC, 500V B 330PF K
C887	24676470	ELECTROLYTIC, 100V 47UF M 3A
C888	24214331	CERAMIC DISC, 500V B 330PF K
C889	24073157	ELECTROLYTIC CE04P 16V 1500UF M 3A
C890	24214331	CERAMIC DISC, 500V B 330PF K
C891	24073145	ELECTROLYTIC CE04P 10V 3300UF M 3A
C892	24214331	CERAMIC DISC, 500V B 330PF K
C893	24073145	ELECTROLYTIC CE04P 10V 3300UF M 3A
C894	24214331	CERAMIC DISC, 500V B 330PF K
C895	24073193	ELECTROLYTIC CE04P 35V 2200UF M 3A
C898	24503041	PLASTIC FILM , 63V 0.1UF J
⚠ C899	24092567	CERAMIC DISC, AC250V E 1000PF M
C4100	24109103	CERAMIC CHIP, 50V B 0.01UF K
C4101	24092731	CERAMIC CHIP, 16V B 1UF K

Location No.	Parts No.	Description
C4102	24108150	CERAMIC CHIP, 50V SL 15PF J
C4103	24092730	CERAMIC CHIP, 16V B 0.1UF K
C4104	24092730	CERAMIC CHIP, 16V B 0.1UF K
C4105	24092731	CERAMIC CHIP, 16V B 1UF K
C4106	24092731	CERAMIC CHIP, 16V B 1UF K
C8200	24073067	ELECTROLYTIC, 35V 47UF M 3A
C8201	24503047	PLASTIC FILM, 63V 0.33UF J
C8202	24073151	ELECTROLYTIC CE04P 16V 120UF M 3A
C8210	24073172	ELECTROLYTIC CE04P 25V 1000UF M 3A
C8211	24503041	PLASTIC FILM , 63V 0.1UF J
C8212	24214221	CERAMIC DISC, 500V B 220PF K
C8213	24503041	PLASTIC FILM , 63V 0.1UF J
C8214	24617006	ELECTROLYTIC, 25V 820UF M
C8215	24073138	ELECTROLYTIC CE04P 10V 220UF M 3A
C8220	24073068	ELECTROLYTIC, 35V 100UF M 3A
C8221	24073153	ELECTROLYTIC CE04P 16V 470UF M 3A
C8223	24073086	ELECTROLYTIC, 50V 10UF M 3A
C8224	24073139	ELECTROLYTIC CE04P 10V 470UF M 3A
C8226	24503047	PLASTIC FILM, 63V 0.33UF J
C8227	24503047	PLASTIC FILM, 63V 0.33UF J
C8240	24073038	ELECTROLYTIC, 16V 100UF M 3A
C8241	24503047	PLASTIC FILM, 63V 0.33UF J
C8242	24073125	ELECTROLYTIC CE04P 6.3V 150UF M 3A
C8250	24073138	ELECTROLYTIC CE04P 10V 220UF M 3A
C8251	24567334	PLASTIC FILM, 50V 0.33UF J
C8252	24073138	ELECTROLYTIC CE04P 10V 220UF M 3A
C8253	24669339	ELECTROLYTIC, 50V 3.3UF M
C8905	24073038	ELECTROLYTIC, 16V 100UF M 3A
C8911	24503047	PLASTIC FILM, 63V 0.33UF J
C8921	24073138	ELECTROLYTIC CE04P 10V 220UF M 3A
C8930	24073067	ELECTROLYTIC, 35V 47UF M 3A
C8932	24073052	ELECTROLYTIC, 25V 47UF M 3A
C8933	24073040	ELECTROLYTIC, 16V 330UF M 3
C8940	24073067	ELECTROLYTIC, 35V 47UF M 3A
C8942	24073052	ELECTROLYTIC, 25V 47UF M 3A
C8943	24073040	ELECTROLYTIC, 16V 330UF M 3
CA81	24109183	CERAMIC CHIP, 50V B 18000PF K
CA82	24109183	CERAMIC CHIP, 50V B 18000PF K
CA83	24109102	CERAMIC CHIP, 50V B 1000PF K
CA84	24109183	CERAMIC CHIP, 50V B 18000PF K
CA85	24109183	CERAMIC CHIP, 50V B 18000PF K
CA86	24109183	CERAMIC CHIP, 50V B 18000PF K
CA87	24109183	CERAMIC CHIP, 50V B 18000PF K
CA88	24109102	CERAMIC CHIP, 50V B 1000PF K
CA89	24109183	CERAMIC CHIP, 50V B 18000PF K
CA90	24109183	CERAMIC CHIP, 50V B 18000PF K
CA91	24092730	CERAMIC CHIP, 16V B 0.1UF K
CA92	24092730	CERAMIC CHIP, 16V B 0.1UF K
CA93	24619040	ELEC. CHIP, 16V 10UF M 3A
CA94	24619040	ELEC. CHIP, 16V 10UF M 3A
CA95	24092730	CERAMIC CHIP, 16V B 0.1UF K
CA96	24092730	CERAMIC CHIP, 16V B 0.1UF K
CA97	24105330	CERAMIC CHIP, 50V CH 33PF J
CA98	24105330	CERAMIC CHIP, 50V CH 33PF J
CB01	24794470	ELECTROLYTIC, 16V 47UF M
CB40	24092538	CERAMIC CHIP, 10V F 1UF Z
CB41	24109222	CERAMIC CHIP, 50V B 2200PF K
CB42	24105561	CERAMIC CHIP, 50V CH 560PF J
CB43	24109332	CERAMIC CHIP, 50V B 3300PF K
CB44	24092859	CERAMIC CHIP CK73B 10V 1UF K
CB81	24092730	CERAMIC CHIP, 16V B 0.1UF K
CC04	24105220	CERAMIC CHIP, 50V CH 22PF J
CC19	24109102	CERAMIC CHIP, 50V B 1000PF K
CC47	24109332	CERAMIC CHIP, 50V B 3300PF K
CC48	24109332	CERAMIC CHIP, 50V B 3300PF K
CC51	24109103	CERAMIC CHIP, 50V B 0.01UF K
CC52	24109103	CERAMIC CHIP, 50V B 0.01UF K
CC61	24109102	CERAMIC CHIP, 50V B 1000PF K
CC62	24109102	CERAMIC CHIP, 50V B 1000PF K

Location No.	Parts No.	Description
CC63	24109223	CERAMIC CHIP, 25V B 0.022UF K
CC64	24109223	CERAMIC CHIP, 25V B 0.022UF K
CC65	24109102	CERAMIC CHIP, 50V B 1000PF K
CC66	24109102	CERAMIC CHIP, 50V B 1000PF K
CC67	24109102	CERAMIC CHIP, 50V B 1000PF K
CC68	24109102	CERAMIC CHIP, 50V B 1000PF K
CC69	24109102	CERAMIC CHIP, 50V B 1000PF K
CC70	24109102	CERAMIC CHIP, 50V B 1000PF K
CC71	24109223	CERAMIC CHIP, 25V B 0.022UF K
CC72	24109223	CERAMIC CHIP, 25V B 0.022UF K
CC73	24109102	CERAMIC CHIP, 50V B 1000PF K
CC74	24109102	CERAMIC CHIP, 50V B 1000PF K
CC75	24109102	CERAMIC CHIP, 50V B 1000PF K
CC76	24109102	CERAMIC CHIP, 50V B 1000PF K
CC77	24109102	CERAMIC CHIP, 50V B 1000PF K
CC78	24109102	CERAMIC CHIP, 50V B 1000PF K
CC79	24109102	CERAMIC CHIP, 50V B 1000PF K
CC80	24109102	CERAMIC CHIP, 50V B 1000PF K
CC81	24109102	CERAMIC CHIP, 50V B 1000PF K
CF34	24092538	CERAMIC CHIP, 10V F 1UF Z
CF38	24794100	ELECTROLYTIC, 16V 10UF M
CF39	24109103	CERAMIC CHIP, 50V B 0.01UF K
CF40	24105121	CERAMIC CHIP, 50V CH 120PF J
CS01	24092795	CERAMIC CHIP, 6.3V B 2.2UF K
CS02	24092795	CERAMIC CHIP, 6.3V B 2.2UF K
CS05	24092795	CERAMIC CHIP, 6.3V B 2.2UF K
CS06	24092795	CERAMIC CHIP, 6.3V B 2.2UF K
CS07	24092795	CERAMIC CHIP, 6.3V B 2.2UF K
CS08	24092795	CERAMIC CHIP, 6.3V B 2.2UF K
CS09	24092795	CERAMIC CHIP, 6.3V B 2.2UF K
CS10	24092795	CERAMIC CHIP, 6.3V B 2.2UF K
CS11	24092795	CERAMIC CHIP, 6.3V B 2.2UF K
CS12	24092795	CERAMIC CHIP, 6.3V B 2.2UF K
CS13	24092795	CERAMIC CHIP, 6.3V B 2.2UF K
CS14	24092795	CERAMIC CHIP, 6.3V B 2.2UF K
CS15	24092795	CERAMIC CHIP, 6.3V B 2.2UF K
CS16	24092795	CERAMIC CHIP, 6.3V B 2.2UF K
CS17	24092795	CERAMIC CHIP, 6.3V B 2.2UF K
CS18	24092795	CERAMIC CHIP, 6.3V B 2.2UF K
CS21	24109103	CERAMIC CHIP, 50V B 0.01UF K
CS22	24794470	ELECTROLYTIC, 16V 47UF M
CS23	24794220	ELECTROLYTIC, 16V 22UF M
CS24	24797229	ELECTROLYTIC, 50V 2.2UF M
CS25	24797229	ELECTROLYTIC, 50V 2.2UF M
CS26	24797229	ELECTROLYTIC, 50V 2.2UF M
CS27	24797229	ELECTROLYTIC, 50V 2.2UF M
CS28	24797479	ELECTROLYTIC, 50V 4.7UF M
CS29	24797479	ELECTROLYTIC, 50V 4.7UF M
CS30	24794470	ELECTROLYTIC, 16V 47UF M
CS31	24794100	ELECTROLYTIC, 16V 10UF M
CS32	24794100	ELECTROLYTIC, 16V 10UF M
CS33	24794100	ELECTROLYTIC, 16V 10UF M
CS34	24794100	ELECTROLYTIC, 16V 10UF M
CS35	24794100	ELECTROLYTIC, 16V 10UF M
CS36	24794100	ELECTROLYTIC, 16V 10UF M
CS37	24794100	ELECTROLYTIC, 16V 10UF M
CV01	24794101	ELECTROLYTIC, 16V 100UF M
CV02	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV03	24794101	ELECTROLYTIC, 16V 100UF M
CV04	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV05	24794101	ELECTROLYTIC, 16V 100UF M
CV06	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV11	24092731	CERAMIC CHIP, 16V B 1UF K
CV12	24092731	CERAMIC CHIP, 16V B 1UF K
CV13	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV14	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV15	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV16	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV17	24092731	CERAMIC CHIP, 16V B 1UF K

Location No.	Parts No.	Description
CV18	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV19	24092731	CERAMIC CHIP, 16V B 1UF K
CV20	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV21	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV22	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV23	24092731	CERAMIC CHIP, 16V B 1UF K
CV24	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV25	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV26	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV27	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV28	24092731	CERAMIC CHIP, 16V B 1UF K
CV29	24092731	CERAMIC CHIP, 16V B 1UF K
CV30	24092731	CERAMIC CHIP, 16V B 1UF K
CV31	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV32	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV33	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV34	24092731	CERAMIC CHIP, 16V B 1UF K
CV35	24092731	CERAMIC CHIP, 16V B 1UF K
CV36	24092731	CERAMIC CHIP, 16V B 1UF K
CV39	24794101	ELECTROLYTIC, 16V 100UF M
CV40	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV41	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV42	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV44	24794470	ELECTROLYTIC, 16V 47UF M
CV45	24203101	ELECTROLYTIC, 16V 100UF M 7L 3A
CV46	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV47	24092538	CERAMIC CHIP, 10V F 1UF Z
CV48	24092538	CERAMIC CHIP, 10V F 1UF Z
CV49	24092538	CERAMIC CHIP, 10V F 1UF Z
CV50	24092538	CERAMIC CHIP, 10V F 1UF Z
CV52	24203101	ELECTROLYTIC, 16V 100UF M 7L 3A
CV53	24092621	CERAMIC CHIP, 10V B 1UF K
CV57	24794101	ELECTROLYTIC, 16V 100UF M
CV61	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV62	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV63	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV64	24762471	ELECTROLYTIC, 10V 470UF M
CV67	24794101	ELECTROLYTIC, 16V 100UF M
CV74	24794101	ELECTROLYTIC, 16V 100UF M
CV75	24794101	ELECTROLYTIC, 16V 100UF M
CV76	24092538	CERAMIC CHIP, 10V F 1UF Z
CV77	24092538	CERAMIC CHIP, 10V F 1UF Z
CV78	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV80	24794471	ELECTROLYTIC, 16V 470UF M
CV81	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV82	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV89	24794471	ELECTROLYTIC, 16V 470UF M
CV91	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV92	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV93	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV94	24794101	ELECTROLYTIC, 16V 100UF M
CV95	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV96	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV97	24762471	ELECTROLYTIC, 10V 470UF M
CV98	24762471	ELECTROLYTIC, 10V 470UF M
RESISTORS		
R170	24011101	CHIP, 1/20W 100 OHM J
R171	24011183	CHIP, 1/20W 18K OHM J
R172	24011273	CHIP, 1/20W 27K OHM J
R271	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R272	24011473	CHIP, 1/20W 47K OHM J
R273	24011102	CHIP, 1/20W 1K OHM J
R274	24011101	CHIP, 1/20W 100 OHM J
R275	24011683	CHIP, METAL FILM, 1/20W 68K OHM J
R276	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R601	24011332	CHIP, 1/20W 3.3K OHM J
R602	24011332	CHIP, 1/20W 3.3K OHM J
R603	24011561	CHIP, 1/20W 560 OHM J

Location No.	Parts No.	Description
R604	24011561	CHIP, 1/20W 560 OHM J
R605	24011223	CHIP, 1/20W 22K OHM J
R606	24011223	CHIP, 1/20W 22K OHM J
R607	24011563	CHIP, 1/20W 56K OHM J
R608	24011223	CHIP, 1/20W 22K OHM J
R609	24011223	CHIP, 1/20W 22K OHM J
R610	24011223	CHIP, 1/20W 22K OHM J
R611	24011473	CHIP, 1/20W 47K OHM J
R612	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R613	24011223	CHIP, 1/20W 22K OHM J
R614	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R615	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
R616	24011822	CHIP, 1/20W 8.2K OHM J
R618	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R619	24011224	CHIP, METAL FILM, 1/20W 220K OHM J
R620	24553471	OXIDE METAL FILM, 1W 470 OHM J
R621	24011392	CHIP, 1/20W 3.9K OHM J
R622	24011183	CHIP, 1/20W 18K OHM J
R623	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R624	24011822	CHIP, 1/20W 8.2K OHM J
R625	24011822	CHIP, 1/20W 8.2K OHM J
R626	24011822	CHIP, 1/20W 8.2K OHM J
R627	24011822	CHIP, 1/20W 8.2K OHM J
R628	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R629	24011472	CHIP, 1/20W 4.7K OHM J
R630	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
R633	24011222	CHIP, 1/20W 2.2K OHM J
R641	24011562	CHIP, 1/20W 5.6K OHM J
R642	24011562	CHIP, 1/20W 5.6K OHM J
R643	24011153	CHIP, METAL FILM, 1/2OW 15K OHM J
R644	24011153	CHIP, METAL FILM, 1/2OW 15K OHM J
R645	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R646	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R651	24011473	CHIP, 1/20W 47K OHM J
R652	24011473	CHIP, 1/20W 47K OHM J
R653	24011122	CHIP, METAL FILM, 1/20W 1.2K OHM J
R654	24011122	CHIP, METAL FILM, 1/20W 1.2K OHM J
R655	24011223	CHIP, 1/20W 22K OHM J
R656	24011223	CHIP, 1/20W 22K OHM J
R659	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R660	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R661	24011472	CHIP, 1/20W 4.7K OHM J
R662	24011473	CHIP, 1/20W 47K OHM J
R663	24553470	OXIDE METAL FILM, 1W 47 OHM J
R664	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R665	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R667	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
R691	24011222	CHIP, 1/20W 2.2K OHM J
R692	24011391	CHIP, 1/20W 390 OHM J
R693	24011223	CHIP, 1/20W 22K OHM J
R694	24011223	CHIP, 1/20W 22K OHM J
R695	24011391	CHIP, 1/20W 390 OHM J
R696	24011223	CHIP, 1/20W 22K OHM J
R697	24552470	OXIDE METAL FILM, 1/2W 47 OHM J
R698	24552470	OXIDE METAL FILM, 1/2W 47 OHM J
⚠ R801	24009954	METAL FILN, 1/2W 2.2M OHM J
R810	24568479	CERAMIC COVERED, 7W 4.7 OHM J
R811	24007061	CERAMIC COVERED, 2W 1.8 OHM K
R840	24552562	OXIDE METAL FILM, 1/2W 5.6K OHM J
R841	24366102	CARBON FILM, 1/6W 1K OHM J
R845	24366103	CARBON FILM, 1/6W 10K OHM J
R846	24366472	CARBON FILM, 1/6W 4.7K OHM J
R847	24366103	CARBON FILM, 1/6W 10K OHM J
R848	24366332	CARBON FILM, 1/6W 3.3K OHM J
R849	24552470	OXIDE METAL FILM, 1/2W 47 OHM J
R850	24366153	CARBON FILM, 1/6W 15K OHM J
R860	24382101	OXIDE METAL FILM, 1W 100 OHM J
R861	24383333	OXIDE METAL FILM, 2W 33K OHM J
R862	24004945	METAL FILM, 1W 0.18 OHM J

Location No.	Parts No.	Description
R863	24004944	METAL FILM, 1W 0.15 OHM J
R865	24381221	OXIDE METAL FILM, 1/2W 220 OHM J
R866	24366681	CARBON FILM, 1/6W 680 OHM J
R867	24366152	CARBON FILM, 1/6W 1.5K OHM J
R868	24555473	OXIDE METAL FILM, 3W 47K OHM J
R869	24366152	CARBON FILM, 1/6W 1.5K OHM J
R870	24366154	CARBON FILM, 1/6W 150K OHM J
R881	24366222	CARBON FILM, 1/6W 2.2K OHM J
R882	24366471	CARBON FILM, 1/6W 470 OHM J
R885	24366102	CARBON FILM, 1/6W 1K OHM J
R886	24000525	METAL FILM, 1/4W 4.7K OHM F
R887	24367683	CARBON FILM, 1/6W 68K OHM G
R888	24000525	METAL FILM, 1/4W 4.7K OHM F
R889	24382332	OXIDE FILM 1W 3.3K J
R891	24555331	OXIDE METAL FILM, 3W 330 OHM J
R892	24555331	OXIDE METAL FILM, 3W 330 OHM J
⚠ R899	24005014	METAL FILM, 1W 8.2M OHM J
R4100	24011101	CHIP, 1/20W 100 OHM J
R4101	24011681	CHIP, METAL FILM, 1/20W 680 OHM J
R4102	24011471	CHIP, 1/20W 470 OHM J
R4103	24011102	CHIP, 1/20W 1K OHM J
R4104	24011152	CHIP, 1/20W 1.5K OHM J
R4105	24011101	CHIP, 1/20W 100 OHM J
R4106	24011681	CHIP, METAL FILM, 1/20W 680 OHM J
R4107	24011471	CHIP, 1/20W 470 OHM J
R4108	24011102	CHIP, 1/20W 1K OHM J
R4109	24011152	CHIP, 1/20W 1.5K OHM J
R4110	24011101	CHIP, 1/20W 100 OHM J
R4111	24011102	CHIP, 1/20W 1K OHM J
R4112	24011152	CHIP, 1/20W 1.5K OHM J
R4113	24011101	CHIP, 1/20W 100 OHM J
R4114	24011102	CHIP, 1/20W 1K OHM J
R4115	24011102	CHIP, 1/20W 1K OHM J
R4116	24011102	CHIP, 1/20W 1K OHM J
R4117	24011102	CHIP, 1/20W 1K OHM J
R4118	24998103	CHIP, 1/16W 10K OHM
R4120	24000445	CHIP JUMPER, 1608TYPE
R4122	24000445	CHIP JUMPER, 1608TYPE
R4125	24011102	CHIP, 1/20W 1K OHM J
R4126	24011152	CHIP, 1/20W 1.5K OHM J
R8200	24367390	CARBON FILM, 1/6W 390 OHM G
R8201	24367332	CARBON FILM, 1/6W 3.3K OHM G
R8210	24000147	METAL FILM, 1/4W 470 OHM F
R8211	24000219	METAL FILM, 1/4W 10 OHM F
R8220	24367390	CARBON FILM, 1/6W 390 OHM G
R8240	24000366	METAL FILM, 1/4W 2.2K OHM F
R8241	24000360	METAL FILM, 1/4W 1.2K OHM F
R8242	24366101	CARBON FILM, 1/6W 100 OHM J
R8250	24000145	METAL FILM, 1/4W 330 OHM F
R8251	24000145	METAL FILM, 1/4W 330 OHM F
R8252	24367392	CARBON FILM, 1/6W 3.9K OHM G
R8902	24366222	CARBON FILM, 1/6W 2.2K OHM J
R8903	24366222	CARBON FILM, 1/6W 2.2K OHM J
R8904	24366472	CARBON FILM, 1/6W 4.7K OHM J
R8905	24366681	CARBON FILM, 1/6W 680 OHM J
R8908	24366473	CARBON FILM, 1/6W 47K OHM J
R8910	24366821	CARBON FILM, 1/6W 820 OHM J
R8911	24366103	CARBON FILM, 1/6W 10K OHM J
R8912	24366223	CARBON FILM, 1/6W 22K OHM J
R8913	24366334	CARBON FILM, 1/6W 330K OHM J
R8914	24366223	CARBON FILM, 1/6W 22K OHM J
R8915	24366102	CARBON FILM, 1/6W 1K OHM J
R8917	24366102	CARBON FILM, 1/6W 1K OHM J
R8931	24367123	CARBON FILM, 1/6W 12K OHM G
R8932	24367152	CARBON FILM, 1/6W 1.5K OHM G
R8934	24367472	CARBON FILM, 1/6W 4.7K OHM G
R8941	24367123	CARBON FILM, 1/6W 12K OHM G
R8942	24367152	CARBON FILM, 1/6W 1.5K OHM G
R8944	24367472	CARBON FILM, 1/6W 4.7K OHM G

Location No.	Parts No.	Description
R8950	24366103	CARBON FILM, 1/6W 10K OHM J
R8951	24366103	CARBON FILM, 1/6W 10K OHM J
RA71	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RA72	24011223	CHIP, 1/20W 22K OHM J
RA73	24011683	CHIP, METAL FILM, 1/20W 68K OHM J
RA75	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RA76	24011223	CHIP, 1/20W 22K OHM J
RA77	24011683	CHIP, METAL FILM, 1/20W 68K OHM J
RA78	24000445	CHIP JUMPER, 1608TYPE
RA79	24000445	CHIP JUMPER, 1608TYPE
RA81	24011102	CHIP, 1/20W 1K OHM J
RA82	24011102	CHIP, 1/20W 1K OHM J
RA84	24011102	CHIP, 1/20W 1K OHM J
RA85	24011102	CHIP, 1/20W 1K OHM J
RA86	24011102	CHIP, 1/20W 1K OHM J
RA87	24011102	CHIP, 1/20W 1K OHM J
RA89	24011102	CHIP, 1/20W 1K OHM J
RA90	24011102	CHIP, 1/20W 1K OHM J
RA91	24011470	CHIP, 1/20W 47 OHM J
RA92	24011470	CHIP, 1/20W 47 OHM J
RA93	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RA94	24011332	CHIP, 1/20W 3.3K OHM J
RA95	24011332	CHIP, 1/20W 3.3K OHM J
RB12	24366471	CARBON FILM, 1/6W 470 OHM J
RB15	24366470	CARBON FILM, 1/6W 47 OHM J
RB32	24011105	CHIP, METAL FILM, 1/20W 1M OHM J
RB33	24011123	CHIP, METAL FILM, 1/20W 12K OHM J
RB34	24011392	CHIP, 1/20W 3.9K OHM J
RB35	24011392	CHIP, 1/20W 3.9K OHM J
RB41	24011222	CHIP, 1/20W 2.2K OHM J
RB42	24011473	CHIP, 1/20W 47K OHM J
RB43	24011473	CHIP, 1/20W 47K OHM J
RB44	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RB46	24011333	CHIP, METAL FILM, 1/20W 33K OHM J
RB49	24011331	CHIP, 1/20W 330 OHM J
RB81	24011471	CHIP, 1/20W 470 OHM J
RB82	24011471	CHIP, 1/20W 470 OHM J
RB83	24011102	CHIP, 1/20W 1K OHM J
RB84	24011473	CHIP, 1/20W 47K OHM J
RB87	24011102	CHIP, 1/20W 1K OHM J
RB88	24011102	CHIP, 1/20W 1K OHM J
RB89	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RB90	24011562	CHIP, 1/20W 5.6K OHM J
RB92	24011473	CHIP, 1/20W 47K OHM J
RB93	24011102	CHIP, 1/20W 1K OHM J
RC50	24011681	CHIP, METAL FILM, 1/20W 680 OHM J
RC51	24011681	CHIP, METAL FILM, 1/20W 680 OHM J
RC61	24011681	CHIP, METAL FILM, 1/20W 680 OHM J
RC62	24011681	CHIP, METAL FILM, 1/20W 680 OHM J
RC63	24011681	CHIP, METAL FILM, 1/20W 680 OHM J
RC64	24011681	CHIP, METAL FILM, 1/20W 680 OHM J
RC65	24011681	CHIP, METAL FILM, 1/20W 680 OHM J
RC66	24011681	CHIP, METAL FILM, 1/20W 680 OHM J
RC67	24011681	CHIP, METAL FILM, 1/20W 680 OHM J
RC68	24011681	CHIP, METAL FILM, 1/20W 680 OHM J
RC69	24011681	CHIP, METAL FILM, 1/20W 680 OHM J
RC70	24011681	CHIP, METAL FILM, 1/20W 680 OHM J
RC71	24011821	CHIP, 1/20W 820 OHM J
RC72	24011821	CHIP, 1/20W 820 OHM J
RF18	24011101	CHIP, 1/20W 100 OHM J
RF19	24011223	CHIP, 1/20W 22K OHM J
RF20	24011473	CHIP, 1/20W 47K OHM J
RF21	24011102	CHIP, 1/20W 1K OHM J
RF22	24011102	CHIP, 1/20W 1K OHM J
RF23	24011101	CHIP, 1/20W 100 OHM J
RF24	24011102	CHIP, 1/20W 1K OHM J
RF25	24000445	CHIP JUMPER, 1608TYPE
RF26	24011271	CHIP, 1/20W 270 OHM J
RF27	24011471	CHIP, 1/20W 470 OHM J

Location No.	Parts No.	Description
RR01	24871750	CHIP, 1/8W 75 OHM J
RR02	24871750	CHIP, 1/8W 75 OHM J
RR03	24871750	CHIP, 1/8W 75 OHM J
RR04	24011330	CHIP, 1/20W 33 OHM J
RR05	24011330	CHIP, 1/20W 33 OHM J
RR06	24011330	CHIP, 1/20W 33 OHM J
RS01	24011562	CHIP, 1/20W 5.6K OHM J
RS02	24011562	CHIP, 1/20W 5.6K OHM J
RS05	24011562	CHIP, 1/20W 5.6K OHM J
RS06	24011562	CHIP, 1/20W 5.6K OHM J
RS07	24011562	CHIP, 1/20W 5.6K OHM J
RS08	24011562	CHIP, 1/20W 5.6K OHM J
RS09	24011562	CHIP, 1/20W 5.6K OHM J
RS10	24011562	CHIP, 1/20W 5.6K OHM J
RS11	24011562	CHIP, 1/20W 5.6K OHM J
RS12	24011562	CHIP, 1/20W 5.6K OHM J
RS13	24011562	CHIP, 1/20W 5.6K OHM J
RS14	24011562	CHIP, 1/20W 5.6K OHM J
RS15	24011562	CHIP, 1/20W 5.6K OHM J
RS16	24011562	CHIP, 1/20W 5.6K OHM J
RS17	24011562	CHIP, 1/20W 5.6K OHM J
RS18	24011562	CHIP, 1/20W 5.6K OHM J
RS21	24011101	CHIP, 1/20W 100 OHM J
RS22	24011101	CHIP, 1/20W 100 OHM J
RS23	24000445	CHIP JUMPER, 1608TYPE
RS24	24000445	CHIP JUMPER, 1608TYPE
RS25	24000445	CHIP JUMPER, 1608TYPE
RS26	24000445	CHIP JUMPER, 1608TYPE
RS27	24011101	CHIP, 1/20W 100 OHM J
RS28	24011101	CHIP, 1/20W 100 OHM J
RS29	24011682	CHIP, METAL FILM, 1/20W 6.8K OHM J
RS30	24011182	CHIP, METAL FILM, 1/20W 1.8K OHM J
RS31	24011100	CHIP, METAL FILM, 1/20W 10 OHM J
RS32	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RS33	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RS34	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RS35	24011473	CHIP, 1/20W 47K OHM J
RS36	24011473	CHIP, 1/20W 47K OHM J
RS37	24011473	CHIP, 1/20W 47K OHM J
RS38	24011473	CHIP, 1/20W 47K OHM J
RS39	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RS40	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RS41	24011393	CHIP, 1/20W 39K OHM J
RS42	24011563	CHIP, 1/20W 56K OHM J
RS43	24011101	CHIP, 1/20W 100 OHM J
RS44	24011222	CHIP, 1/20W 2.2K OHM J
RS45	24011393	CHIP, 1/20W 39K OHM J
RS46	24011563	CHIP, 1/20W 56K OHM J
RS47	24011101	CHIP, 1/20W 100 OHM J
RS48	24011222	CHIP, 1/20W 2.2K OHM J
RS51	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RS52	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RS53	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RS54	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RS55	24011271	CHIP, 1/20W 270 OHM J
RS56	24011271	CHIP, 1/20W 270 OHM J
RS57	24011223	CHIP, 1/20W 22K OHM J
RS58	24011223	CHIP, 1/20W 22K OHM J
RS59	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RS60	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RS61	24011271	CHIP, 1/20W 270 OHM J
RS62	24011271	CHIP, 1/20W 270 OHM J
RS63	24011223	CHIP, 1/20W 22K OHM J
RS64	24011223	CHIP, 1/20W 22K OHM J
RS65	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RS66	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RS67	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RS68	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RS69	24011681	CHIP, METAL FILM, 1/20W 680 OHM J

Location No.	Parts No.	Description
RS70	24011681	CHIP, METAL FILM, 1/20W 680 OHM J
RS71	24011223	CHIP, 1/20W 22K OHM J
RS72	24011223	CHIP, 1/20W 22K OHM J
RS73	24011223	CHIP, 1/20W 22K OHM J
RS74	24011223	CHIP, 1/20W 22K OHM J
RS75	24011222	CHIP, 1/20W 2.2K OHM J
RS98	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RS99	24011102	CHIP, 1/20W 1K OHM J
RV01	24011101	CHIP, 1/20W 100 OHM J
RV02	24011101	CHIP, 1/20W 100 OHM J
RV03	24011101	CHIP, 1/20W 100 OHM J
RV04	24011101	CHIP, 1/20W 100 OHM J
RV05	24011101	CHIP, 1/20W 100 OHM J
RV08	24011101	CHIP, 1/20W 100 OHM J
RV09	24000445	CHIP JUMPER, 1608TYPE
RV11	24011101	CHIP, 1/20W 100 OHM J
RV14	24019388	CHIP, 1/16W 10K OHM F
RV15	24011101	CHIP, 1/20W 100 OHM J
RV16	24011101	CHIP, 1/20W 100 OHM J
RV17	24011101	CHIP, 1/20W 100 OHM J
RV18	24011101	CHIP, 1/20W 100 OHM J
RV19	24011101	CHIP, 1/20W 100 OHM J
RV23	24011101	CHIP, 1/20W 100 OHM J
RV24	24019388	CHIP, 1/16W 10K OHM F
RV28	24011101	CHIP, 1/20W 100 OHM J
RV29	24011101	CHIP, 1/20W 100 OHM J
RV30	24011101	CHIP, 1/20W 100 OHM J
RV33	24019388	CHIP, 1/16W 10K OHM F
RV34	24011101	CHIP, 1/20W 100 OHM J
RV35	24011101	CHIP, 1/20W 100 OHM J
RV36	24011101	CHIP, 1/20W 100 OHM J
RV37	24011100	CHIP, METAL FILM, 1/20W 10 OHM J
RV38	24011100	CHIP, METAL FILM, 1/20W 10 OHM J
RV39	24011100	CHIP, METAL FILM, 1/20W 10 OHM J
RV40	24011683	CHIP, METAL FILM, 1/20W 68K OHM J
RV41	24011683	CHIP, METAL FILM, 1/20W 68K OHM J
RV43	24011101	CHIP, 1/20W 100 OHM J
RV45	24011100	CHIP, METAL FILM, 1/20W 10 OHM J
RV46	24019384	CHIP, METAL FILM, 1/16W 3.9K OHM F
RV47	24019350	METAL FILM CHIP 1/16W 1R5K F
RV48	24019384	CHIP, METAL FILM, 1/16W 3.9K OHM F
RV49	24019350	METAL FILM CHIP 1/16W 1R5K F
RV50	24019384	CHIP, METAL FILM, 1/16W 3.9K OHM F
RV51	24019350	METAL FILM CHIP 1/16W 1R5K F
RV52	24000445	CHIP JUMPER, 1608TYPE
RV53	24011101	CHIP, 1/20W 100 OHM J
RV54	24011101	CHIP, 1/20W 100 OHM J
RV55	24011101	CHIP, 1/20W 100 OHM J
RV56	24011101	CHIP, 1/20W 100 OHM J
RV57	24011101	CHIP, 1/20W 100 OHM J
RV58	24011101	CHIP, 1/20W 100 OHM J
RV59	24011101	CHIP, 1/20W 100 OHM J
RV60	24011222	CHIP, 1/20W 2.2K OHM J
RV61	24011101	CHIP, 1/20W 100 OHM J
RV62	24011222	CHIP, 1/20W 2.2K OHM J
RV65	24011101	CHIP, 1/20W 100 OHM J
RV66	24871471	CHIP, 1/8W 470 OHM J
RV67	24011330	CHIP, 1/20W 33 OHM J
RV68	24872750	CHIP, 1/16W 75 OHM J
RV69	24872750	CHIP, 1/16W 75 OHM J
RV70	24011330	CHIP, 1/20W 33 OHM J
RV71	24011101	CHIP, 1/20W 100 OHM J
RV72	24871471	CHIP, 1/8W 470 OHM J
RV73	24011330	CHIP, 1/20W 33 OHM J
RV75	24872750	CHIP, 1/16W 75 OHM J
RV76	24872750	CHIP, 1/16W 75 OHM J
RV77	24872750	CHIP, 1/16W 75 OHM J
RV78	24011101	CHIP, 1/20W 100 OHM J
RV79	24871471	CHIP, 1/8W 470 OHM J

Location No.	Parts No.	Description
RV82	24011101	CHIP, 1/20W 100 OHM J
RV83	24366471	CARBON FILM, 1/6W 470 OHM J
RV84	24011101	CHIP, 1/20W 100 OHM J
RV85	24366471	CARBON FILM, 1/6W 470 OHM J
RV88	24011100	CHIP, METAL FILM, 1/20W 10 OHM J
RV101	24011101	CHIP, 1/20W 100 OHM J
RV103	24871271	CHIP, 1/8W 270 OHM J
RV111	24011101	CHIP, 1/20W 100 OHM J
RV113	24871271	CHIP, 1/8W 270 OHM J
RV123	24871271	CHIP, 1/8W 270 OHM J
RV124	24011101	CHIP, 1/20W 100 OHM J
RV210	24000824	CHIP JUMPER, 2125TYPE
RV211	24000824	CHIP JUMPER, 2125TYPE
RV212	24872750	CHIP, 1/16W 75 OHM J
RV213	24872750	CHIP, 1/16W 75 OHM J
RV214	24872750	CHIP, 1/16W 75 OHM J
RV215	24872750	CHIP, 1/16W 75 OHM J
RV216	24872151	CHIP, 1/16W 150 OHM J
RV217	24872151	CHIP, 1/16W 150 OHM J
RV218	24872750	CHIP, 1/16W 75 OHM J
RV219	24872750	CHIP, 1/16W 75 OHM J
RV220	24872750	CHIP, 1/16W 75 OHM J
RV229	24872750	CHIP, 1/16W 75 OHM J
RV231	24000445	CHIP JUMPER, 1608TYPE
RV232	24000445	CHIP JUMPER, 1608TYPE
RV233	24000445	CHIP JUMPER, 1608TYPE
RV234	24000824	CHIP JUMPER, 2125TYPE
RV235	24872750	CHIP, 1/16W 75 OHM J
RV236	24872750	CHIP, 1/16W 75 OHM J
RV237	24872750	CHIP, 1/16W 75 OHM J
RV238	24872151	CHIP, 1/16W 150 OHM J
RV239	24872151	CHIP, 1/16W 150 OHM J
RV240	24872750	CHIP, 1/16W 75 OHM J
RV241	24872750	CHIP, 1/16W 75 OHM J

COIL & TRANSFORMERS

L101	23248035	COIL, CHOKE, TLN3278D
L102	23289840	COIL, PEAKING, TRF4100AT
L103	23103828	INDUCTOR, BEAD, TEM2121M
L104	23103828	INDUCTOR, BEAD, TEM2121M
L105	23289840	COIL, PEAKING, TRF4100AT
L113	23238506	COIL, PEAKING, TRF4229AJ
L114	23238506	COIL, PEAKING, TRF4229AJ
L840	23280018	COIL, PEAKING, TRF4220AZ
L841	23103145	FERRITE CHOKE, TEM2011AA
L842	23248297	COIL, CHOKE, TLN3481GH
L843	23248297	COIL, CHOKE, TLN3481GH
L850	23103145	FERRITE CHOKE, TEM2011AA
L851	23103145	FERRITE CHOKE, TEM2011AA
L861	23103145	FERRITE CHOKE, TEM2011AA
L862	23103775	FERRITE CHOKE, TEM2014
L881	23103145	FERRITE CHOKE, TEM2011AA
L882	23103145	FERRITE CHOKE, TEM2011AA
L883	23103145	FERRITE CHOKE, TEM2011AA
L884	23103145	FERRITE CHOKE, TEM2011AA
L885	23103145	FERRITE CHOKE, TEM2011AA
L886	23103145	FERRITE CHOKE, TEM2011AA
L888	23248321	COIL, CHOKE, TLN3462AH
L890	23248292	COIL, CHOKE, TLN3499GH
L891	23248292	COIL, CHOKE, TLN3499GH
L892	23248292	COIL, CHOKE, TLN3499GH
L893	23248297	COIL, CHOKE, TLN3481GH
L8210	23280019	COIL, PEAKING, TRF4330AZ
L8211	23248358	COIL, CHOKE, TLN3540AH
L8213	23248297	COIL, CHOKE, TLN3481GH
L8921	23280019	COIL, PEAKING, TRF4330AZ
L8930	23280022	COIL, PEAKING, TRF4101AZ
L8931	23280022	COIL, PEAKING, TRF4101AZ
L8940	23280022	COIL, PEAKING, TRF4101AZ

Location No.	Parts No.	Description
L8941	23280022	COIL, PEAKING, TRF4101AZ
LC14	23103828	INDUCTOR, BEAD, TEM2121M
LC16	23103828	INDUCTOR, BEAD, TEM2121M
LC18	23103828	INDUCTOR, BEAD, TEM2121M
LC29	23103828	INDUCTOR, BEAD, TEM2121M
LC61	23103828	INDUCTOR, BEAD, TEM2121M
LC62	23103828	INDUCTOR, BEAD, TEM2121M
LC63	23103828	INDUCTOR, BEAD, TEM2121M
LC64	23103828	INDUCTOR, BEAD, TEM2121M
LC65	23103828	INDUCTOR, BEAD, TEM2121M
LC66	23103828	INDUCTOR, BEAD, TEM2121M
LC67	23103828	INDUCTOR, BEAD, TEM2121M
LC68	23103828	INDUCTOR, BEAD, TEM2121M
LC69	23103828	INDUCTOR, BEAD, TEM2121M
LC70	23238562	COIL, PEAKING, TRF4109AJ
LC71	23238562	COIL, PEAKING, TRF4109AJ
LV01	23289840	COIL, PEAKING, TRF4100AT
LV02	23277002	FERRITE CORE, COMON MODE, ACM3225-102-2PT100
LV03	23277002	FERRITE CORE, COMON MODE, ACM3225-102-2PT100
LV10	23277002	FERRITE CORE, COMON MODE, ACM3225-102-2PT100
LV11	23277002	FERRITE CORE, COMON MODE, ACM3225-102-2PT100
LV12	23277002	FERRITE CORE, COMON MODE, ACM3225-102-2PT100
LV13	23289840	COIL, PEAKING, TRF4100AT
LV43	23289840	COIL, PEAKING, TRF4100AT
LV44	23289840	COIL, PEAKING, TRF4100AT
⚠ T802	23211780	COIL, LINE FILTER, TRF3228AR
⚠ T803	23211780	COIL, LINE FILTER, TRF3228AR
⚠ T840	23217650	TRANSFORMER, CONVERTER, TPW3541AH
⚠ T844	23217631	TRANSFORMER, CHOKE 1.3MH2.5A TPW2054AH
⚠ T845	23217672	TRANSFORMER, CHOKE, TPW2059AL
⚠ T862	23217682	TRANSFORMER, CONVERTER, TPW3553AS

SEMICONDUCTORS

Q171	23205006	TRANSISTOR, KTC4075Y
Q271	23114499	TRANSISTOR, RN1404
Q272	23114499	TRANSISTOR, RN1404
Q273	23114493	TRANSISTOR, RN2404
Q274	23314993	TRANSISTOR, 2SC4081 Q
Q601	23009603	IC, AN7580
Q610	23205005	TRANSISTOR, KTA2014Y
Q611	23205204	TRANSISTOR, KTC2875B-RTK
Q612	23205204	TRANSISTOR, KTC2875B-RTK
Q613	23314993	TRANSISTOR, 2SC4081 Q
Q614	23114497	TRANSISTOR, RN1406
Q616	23314994	TRANSISTOR, 2SA1576A106
Q617	23906596	IC, BA4558
Q618	23906596	IC, BA4558
Q620	23314993	TRANSISTOR, 2SC4081 Q
Q651	23009942	IC, LA4525-E
Q652	23205204	TRANSISTOR, KTC2875B-RTK
Q653	23205204	TRANSISTOR, KTC2875B-RTK
Q691	23205246	TRANSISTOR, KRA104S(SOT-23)
Q692	23205204	TRANSISTOR, KTC2875B-RTK
Q693	23205204	TRANSISTOR, KTC2875B-RTK
Q801	23135037	IC, STR-F6268S
Q840	23135038	IC, MIP2900MPSCF
⚠ Q842	23009270	IC, PHOTO COUPLER, PS2581L1(D)
Q845	23314965	TRANSISTOR, KTC3198 Y
Q846	23314965	TRANSISTOR, KTC3198 Y
Q847	23314965	TRANSISTOR, KTC3198 Y
⚠ Q862	23000823	IC, PHOTO COUPLER, TLP421F(GR)
Q881	23000701	IC, NJM431L
Q4100	23205014	TRANSISTOR, 2SC4667-O
Q4101	23205014	TRANSISTOR, 2SC4667-O
Q4102	23314993	TRANSISTOR, 2SC4081 Q
Q4103	23314993	TRANSISTOR, 2SC4081 Q
Q4104	70114402	TRANSISTOR, 2SC3437-Y
Q4105	70114402	TRANSISTOR, 2SC3437-Y
Q4106	23205005	TRANSISTOR, KTA2014Y

Location No.	Parts No.	Description
Q4107	23205005	TRANSISTOR, KTA2014Y
Q8200	23085050	IC, SI-3120J(LF1101)
Q8210	23000806	IC, SI-8033SS
Q8220	23904163	IC, SI-3090CA
Q8230	23009188	IC, KIA7805API
Q8240	23009998	IC, BA00JC5WT-V5
Q8250	23000469	IC, PQ5EV3
Q8251	70200563	IC, PST9129
Q8901	23314965	TRANSISTOR, KTC3198 Y
Q8902	23314965	TRANSISTOR, KTC3198 Y
Q8904	23314962	TRANSISTOR, KTA1266 Y
Q8911	23314965	TR@† ISTOR, KTC3198 Y
Q8912	23314965	TRANSISTOR, KTC3198 Y
Q8930	23009998	IC, BA00JC5WT-V5
Q8940	23009998	IC, BA00JC5WT-V5
Q8950	23119747	IC, OPE AMP, TA75358P
QA91	23900992	SENSOR, TOUCH QT2C01-AS QT2C01-AS
QA92	23900992	SENSOR, TOUCH QT2C01-AS QT2C01-AS
QA93	23000283	IC, R1121N
QB42	23314994	TRANSISTOR, 2SA1576A106
QB43	23314993	TRANSISTOR, 2SC4081 Q
QB44	23314993	TRANSISTOR, 2SC4081 Q
QB81	23314204	TRANSISTOR, 2SC2412K,Q
QB83	70200849	IC, BA10393F
QB84	23314204	TRANSISTOR, 2SC2412K,Q
QF15	23314994	TRANSISTOR, 2SA1576A106
QF16	23314993	TRANSISTOR, 2SC4081 Q
QF17	23314994	TRANSISTOR, 2SA1576A106
QS01	23009916	IC, MM1631AJBE
QS02	23314993	TRANSISTOR, 2SC4081 Q
QS03	23314993	TRANSISTOR, 2SC4081 Q
QS04	23205116	TRANSISTOR, 2SC5343UF-Y(B
QS05	23205204	TRANSISTOR, KTC2875B-RTK
QS06	23205204	TRANSISTOR, KTC2875B-RTK
QS07	23205204	TRANSISTOR, KTC2875B-RTK
QS08	23205204	TRANSISTOR, KTC2875B-RTK
QS09	23205246	TRANSISTOR, KRA104S(SOT-23)
QS10	23318981	IC, MC14053BF
QS11	23205116	TRANSISTOR, 2SC5343UF-Y(B
QS12	23205204	TRANSISTOR, KTC2875B-RTK
QS13	23205204	TRANSISTOR, KTC2875B-RTK
QV01	23009952	IC, CXA2189Q
QV06	23314994	TRANSISTOR, 2SA1576A106
QV10	23314994	TRANSISTOR, 2SA1576A106
QV11	23314994	TRANSISTOR, 2SA1576A106
QV12	23314994	TRANSISTOR, 2SA1576A106
QV15	23009418	IC, MM1505XNRE
QV18	70128711	IC, BA7603F
QV19	23318981	IC, MC14053BF
QV20	23114501	TRANSISTOR, RN1402
QV61	23314994	TRANSISTOR, 2SA1576A106
QV62	23314994	TRANSISTOR, 2SA1576A106
QV63	23314994	TRANSISTOR, 2SA1576A106
QV71	23314163	TRANSISTOR, 2SA1162-Y
QV72	23314163	TRANSISTOR, 2SA1162-Y
D101	23316755	DIODE, ZENER, MTZJ33C
D102	23316571	DIODE, ZENER, MA8056-M
D272	23316231	DIODE, 1SS355
D603	23316231	DIODE, 1SS355
D604	23316231	DIODE, 1SS355
D605	23316231	DIODE, 1SS355
D606	23316231	DIODE, 1SS355
D607	23316231	DIODE, 1SS355
D608	23316231	DIODE, 1SS355
D609	23316231	DIODE, 1SS355
D611	23316231	DIODE, 1SS355
D612	23316231	DIODE, 1SS355
D613	23316231	DIODE, 1SS355
D614	23316231	DIODE, 1SS355

Location No.	Parts No.	Description
D615	23316231	DIODE, 1SS355
D616	23316231	DIODE, 1SS355
D617	23316231	DIODE, 1SS355
D618	23316231	DIODE, 1SS355
D619	23316231	DIODE, 1SS355
D620	23316231	DIODE, 1SS355
D622	23316231	DIODE, 1SS355
D623	23316231	DIODE, 1SS355
D628	23316597	DIODE, ZENER, MA8120-M
D651	23316231	DIODE, 1SS355
D652	23316231	DIODE, 1SS355
D653	23316231	DIODE, 1SS355
D654	23316231	DIODE, 1SS355
D655	23316591	DIODE, ZENER, MA8100-M
D801	23316393	DIODE, D5SB60, 4009 F05
D840	23357207	DIODE, LN1WBA60
D841	23118528	DIODE, ZENER, RD5.6ESA B3
D842	23118535	DIODE, ZENER, RD4.7ES
D843	23357366	DIODE, FR105-B5
D845	23118859	DIODE, 1SS133
D846	23118633	DIODE, ZENER, RD3.0ES B2
D847	23118633	DIODE, ZENER, RD3.0ES B2
D849	23118859	DIODE, 1SS133
D850	23316706	DIODE, RG4C
D851	23357355	DIODE, FMG-G3CS
D855	23316675	DIODE, ZENER, MTZJ6.2B
D861	23316672	DIODE, ZENER, MTZJ5.6B
D863	23118859	DIODE, 1SS133
D864	23357366	DIODE, FR105-B5
D865	23118859	DIODE, 1SS133
D866	23316381	DIODE, RU1P
D867	23316754	DIODE, ZENER, MTZJ33B
D868	23118623	DIODE, ZENER, RD10ES B1
D869	23118623	DIODE, ZENER, RD10ES B1
D883	23316184	DIODE, FML-G12S
D884	23357366	DIODE, FR105-B5
D885	23316184	DIODE, FML-G12S
D886	23357042	DIODE, FMX-12S(023-108)
D887	23316768	DIODE, FMB-26L
D888	23357353	DIODE, FML-G22S
D899	24000656	VARISTOR, TNR15G471K
D8210	23118213	DIODE, RK44,
D8211	23357258	DIODE, ZENER, DZ4.3 BS B
D8221	23316714	DIODE, RL2Z
D8222	23316714	DIODE, RL2Z
D8223	23316714	DIODE, RL2Z
D8902	23118859	DIODE, 1SS133
D8903	23118859	DIODE, 1SS133
D8911	23316673	DIODE, ZENER, MTZJ5.6C
D8914	23118859	DIODE, 1SS133
D8915	23118859	DIODE, 1SS133
D8950	23118528	DIODE, ZENER, RD5.6ESA B3
D8951	23118528	DIODE, ZENER, RD5.6ESA B3
DB40	23316231	DIODE, 1SS355
DB81	23358584	DIODE, LED, SML-811UTT86
DB82	23358585	LED, LAMP, SML-810MTT86
DMY02	24000445	CHIP JUMPER, 1608TYPE
DR70	23357037	DIODE, ZENER, UDZS5.6B
DR71	23357037	DIODE, ZENER, UDZS5.6B
DV03	23316571	DIODE, ZENER, MA8056-M
DV05	23316571	DIODE, ZENER, MA8056-M
DV09	23316571	DIODE, ZENER, MA8056-M
DV10	23316571	DIODE, ZENER, MA8056-M
DV15	23316571	DIODE, ZENER, MA8056-M
DV16	23357037	DIODE, ZENER, UDZS5.6B
DV17	23316571	DIODE, ZENER, MA8056-M
DV18	23316571	DIODE, ZENER, MA8056-M
DV19	23316571	DIODE, ZENER, MA8056-M
DV20	23357037	DIODE, ZENER, UDZS5.6B

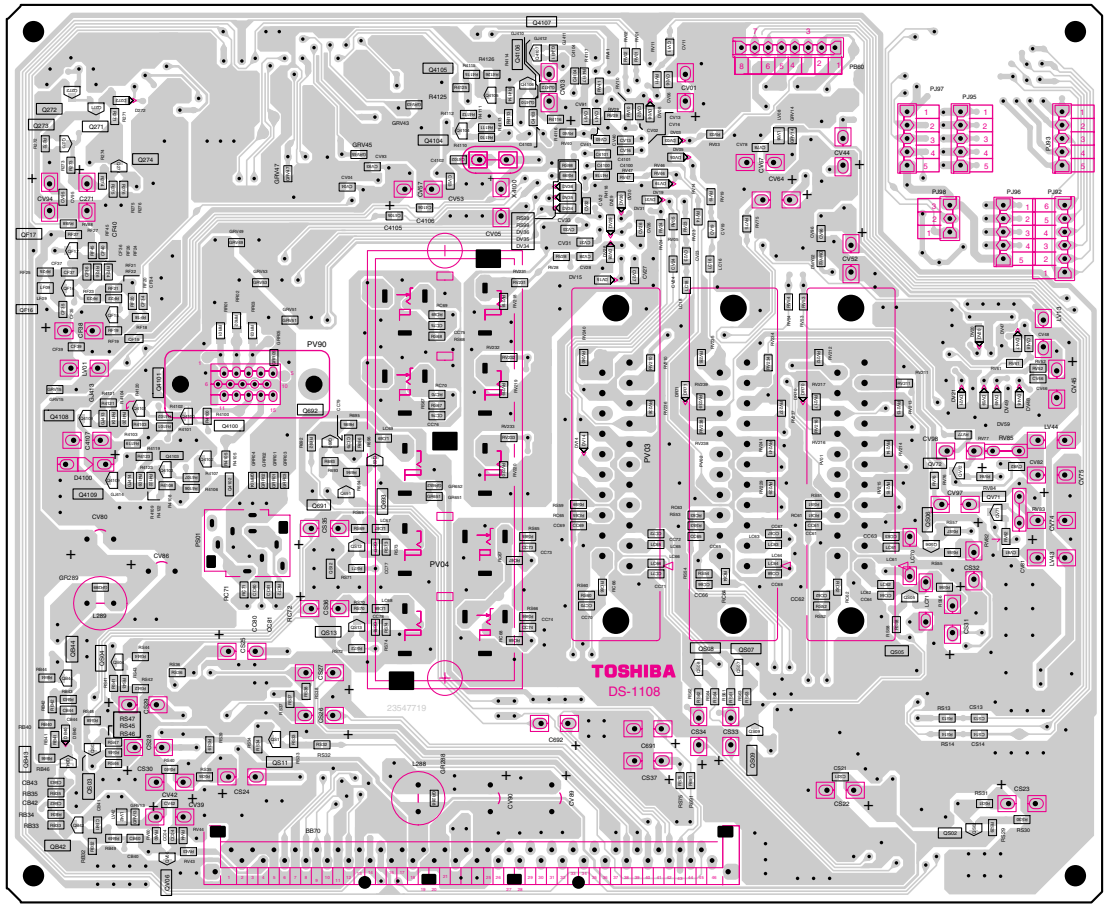
Location No.	Parts No.	Description
DV21	23357037	DIODE, ZENER, UDZS5.6B
DV24	23316571	DIODE, ZENER, MA8056-M
DV28	23316571	DIODE, ZENER, MA8056-M
DV29	23316571	DIODE, ZENER, MA8056-M
DV30	23316571	DIODE, ZENER, MA8056-M
DV31	23316571	DIODE, ZENER, MA8056-M
DV34	23316571	DIODE, ZENER, MA8056-M
DV35	23316571	DIODE, ZENER, MA8056-M
DV36	23316571	DIODE, ZENER, MA8056-M
DV47	23357037	DIODE, ZENER, UDZS5.6B
DV48	23357037	DIODE, ZENER, UDZS5.6B
DV49	23357037	DIODE, ZENER, UDZS5.6B
KB02	23009710	IC, REMOCON RECEIVER, GP1UE281RK
MISCELLANEOUS		
B112	23528410	HOLDER, TERM. COVER 46WM48P
B206	23974994	BAND, KESSOKU
B212	23845859	HOLDER, WIRE, PVC-C0AT, L=70MM
B234	23845856	WIRE CLAMP, POF COAT) L=70MM
B250	23940246	PIECE, TUNER COVER 46WM48P
BB10	23713014	CONNECTOR, BRIDGE PLUG 16P 1.5
BB11	23713013	CONNECTOR, SOCKET, B-B 16P 1.5
BB20	23713014	CONNECTOR, BRIDGE PLUG 16P 1.5
BB21	23713013	CONNECTOR, SOCKET, B-B 16P 1.5
BB70	23713309	PLUG , TAC-A46P-B1
BB71	23903159	SOCKET, TAC A46X B1 TAC-A46X-B1
D801B	70391355	SCREW, BIND HEAD TAP-TITE B, BITTB 3X8 SZN
D888B	70391355	SCREW, BIND HEAD TAP-TITE B, BITTB 3X8 SZN
D883B	70391355	SCREW, BIND HEAD TAP-TITE B, BITTB 3X8 SZN
D885B	70391355	SCREW, BIND HEAD TAP-TITE B, BITTB 3X8 SZN
D886B	70391355	SCREW, BIND HEAD TAP-TITE B, BITTB 3X8 SZN
D887B	70391355	SCREW, BIND HEAD TAP-TITE B, BITTB 3X8 SZN
⚠ F801	23144654	FUSE, CARTRIDGE 5X20 250V 5.0A
F801A	23165433	FUSE HOLDER, 5.2 SOC
F899	23144650	FUSE, CARTRIDGE 5X20, 250V 2.0A
⚠ F899A	23165433	FUSE HOLDER, 5.2 SOC
GJ01	24000445	CHIP JUMPER, 1608TYPE
GJ02	24000445	CHIP JUMPER, 1608TYPE
GJ03	24000445	CHIP JUMPER, 1608TYPE
GJ04	24000445	CHIP JUMPER, 1608TYPE
GJ05	24000445	CHIP JUMPER, 1608TYPE
GJ413	24000445	CHIP JUMPER, 1608TYPE
GJ414	24000445	CHIP JUMPER, 1608TYPE
GR102	24000445	CHIP JUMPER, 1608TYPE
GR288	24000824	CHIP JUMPER, 2125TYPE
GR289	24000824	CHIP JUMPER, 2125TYPE
GR611	24000445	CHIP JUMPER, 1608TYPE
GR651	24000445	CHIP JUMPER, 1608TYPE
GR652	24000445	CHIP JUMPER, 1608TYPE
GR690	24000445	CHIP JUMPER, 1608TYPE
GR691	24000445	CHIP JUMPER, 1608TYPE
GRR01	24000445	CHIP JUMPER, 1608TYPE
GRR02	24000445	CHIP JUMPER, 1608TYPE
GRR03	24000445	CHIP JUMPER, 1608TYPE
GRR04	24000445	CHIP JUMPER, 1608TYPE
GRR05	24000445	CHIP JUMPER, 1608TYPE
GRV48	24000445	CHIP JUMPER, 1608TYPE
GRV49	24000445	CHIP JUMPER, 1608TYPE
GRV50	24000445	CHIP JUMPER, 1608TYPE
GRV51	24000445	CHIP JUMPER, 1608TYPE
GRV52	24000445	CHIP JUMPER, 1608TYPE
GRV53	24000445	CHIP JUMPER, 1608TYPE
JR001	24000445	CHIP JUMPER, 1608TYPE
JR002	24000445	CHIP JUMPER, 1608TYPE
JR003	24000445	CHIP JUMPER, 1608TYPE
JR004	24000445	CHIP JUMPER, 1608TYPE
JR005	24000445	CHIP JUMPER, 1608TYPE
JR006	24000445	CHIP JUMPER, 1608TYPE
JR007	24000445	CHIP JUMPER, 1608TYPE

Location No.	Parts No.	Description
JR008	24000445	CHIP JUMPER, 1608TYPE
JR009	24000445	CHIP JUMPER, 1608TYPE
JR010	24000445	CHIP JUMPER, 1608TYPE
JR011	24000445	CHIP JUMPER, 1608TYPE
JR012	24000445	CHIP JUMPER, 1608TYPE
JR013	24000445	CHIP JUMPER, 1608TYPE
JR014	24000445	CHIP JUMPER, 1608TYPE
M805A	23103839	FERRITE CORE, TFE1012
M811A	23103778	FERRITE CORE, TFE1008
M905A	23103778	FERRITE CORE, TFE1008
M905E	23103840	FERRITE CORE, TFE1013
MA01	23389249	CABLE, FFC P1.25-15-150 P1.25-15-150
MB91A	23103840	FERRITE CORE, TFE1013
MV01	23368868	CABLE, LVDS 300MM
MV01A	23103840	FERRITE CORE, TFE1013
MV05	23389250	CABLE, FFC P1.0-35-320 P1.0-35-320
MX18	23389251	CABLE, FFC 0.5 40P L581 FFC 0.5 40P L581
P605A	23368578	CONNECTOR, PLUG 4P, 2.5MM G JST-EH, B4B-EH-F1-TV4
P661	23363607	JACK, HEAD PHONE, 3.5MM
P800	23368013	CONNECTOR, PLUG, 2P 11.88MM W VT-JST
⚠ P801	23372052	POWER CORD, 250V2.5A
	23372151	POWER CORD, AC250V3A L/FUSE13A GB13F1 FUSE13A
P805	23164965	CONNECTOR, PLUG 4P, W-P3504-#02
P811A	23368274	PLUG, 2P 3.96MM VH-JST VH
P891	23367068	CONNECTOR, PLUG 8P, 2.5MM G JST-EH B8B-EH-F1-TV4
P892	23367073	CONNECTOR, PLUG 13P
P901	23368577	CONNECTOR, PLUG, 3P 2.5MM G JST-EH, B3B-EH-F1-TV4
P902A	23164563	CONNECTOR, PLUG 3P
P903	23368578	CONNECTOR, PLUG 4P, 2.5MM G JST-EH, B4B-EH-F1-TV4
P906	23367070	PLUG , NP 2.5MM G JST-EH B10B-EH-F1A
P907	23367072	PLUG, NP 2.5MM G JST-EH, B12B-EH-F1A
PA01	23713240	CONNECTOR, 15FE-BT-VK-N JST 15FE-BT-VK-N
PB60	23368587	CONNECTOR, PLUG, 8P 2.5MM W EH-JST, S8B-EH
PJ17B	23368578	CONNECTOR, PLUG 4P, 2.5MM G JST-EH, B4B-EH-F1-TV4
PJ92	23368580	CONNECTOR, PLUG 6P, 2.5MM G JST-EH B6B-EH-F1-TV4
PJ93	23368579	CONNECTOR, PLUG 5P, 2.5MM G JST-EH, B5B-EH-F1-TV4
PJ94	23713176	CONNECTOR, FMN-BMTTN-A-TFT FMN-BMTTN-A-TFT
PJ95	23368579	CONNECTOR, PLUG 5P, 2.5MM G JST-EH, B5B-EH-F1-TV4
PJ96	23368579	CONNECTOR, PLUG 5P, 2.5MM G JST-EH, B5B-EH-F1-TV4
PJ97	23368579	CONNECTOR, PLUG 5P, 2.5MM G JST-EH, B5B-EH-F1-TV4
PJ98	23368577	CONNECTOR, PLUG, 3P 2.5MM G JST-EH, B3B-EH-F1-TV4
PS01	23365432	EARPHONE JACK
PV01	23902604	SOCKET
PV02	23902604	SOCKET
PV03	23902604	SOCKET
PV04	23023276	JACK, PIN 10P SMK PIN JACK 10P
PV05	23713393	CONNECTOR, 35FMN SIDETYPE JST 35FMN-SMT-A-TF
PV15B	23368587	CONNECTOR, PLUG, 8P 2.5MM W EH-JST, S8B-EH
PV90	23713583	CONNECTOR, D-SUB 15P 1470655-2
Q820B	70391355	SCREW, BIND HEAD TAP-TITE B, BITTB 3X8 SZN
Q821B	70391355	SCREW, BIND HEAD TAP-TITE B, BITTB 3X8 SZN
Q822B	70391355	SCREW, BIND HEAD TAP-TITE B, BITTB 3X8 SZN
Q823B	70391355	SCREW, BIND HEAD TAP-TITE B, BITTB 3X8 SZN
Q824B	70391355	SCREW, BIND HEAD TAP-TITE B, BITTB 3X8 SZN
Q825B	70391355	SCREW, BIND HEAD TAP-TITE B, BITTB 3X8 SZN
Q893B	70391355	SCREW, BIND HEAD TAP-TITE B, BITTB 3X8 SZN
Q894B	70391355	SCREW, BIND HEAD TAP-TITE B, BITTB 3X8 SZN
⚠ S810	70145484	SWITCH, SPVF11
SK01	23405384	OPTICAL ENGINE, PJ-TB25-46S PJ-TB25-46S
SK02	23587201	SERVICE KIT, SHP66 LAMP UNIT
SK03	23122468	P0WER UNIT, RPB-4434ZA RPB-4434ZA
SK04	23762354	PC BOARD ASSY, SENSOR UNIT PD1823 SENSOR UNIT
SK05	23762355	PC BOARD ASSY, MOTOR UNIT PD1824 MTR UNIT
SK06	23125920	FAN, D09A-12PS6 01B(K)
SK07	23125919	FAN, D07F-12SS18 01B(EX)
SK08	23144199	BREAKER, US-603UXTLQE-H US-603UXTLQE-H
⚠ SR81	23146574	RELAY, DLS5D1-O(M) 0.15W
⚠ SR82	23146564	RELAY, DC12V, TV5, DG-3
W661	23351244	SPEAKER, SPBOX(L) 8-OHM 20W SPK-1455AM

Location No.	Parts No.	Description
W662	23351245	SPEAKER, SPBOX(R) 8-OHM 20W SPK-1456AM
X4100	23153742	CRYSTAL
Z800	23103839	FERRITE CORE, TFE1012
	23103839	FERRITE CORE, TFE1012
⚠ Z831	23144603	PROTECTOR, PRT SERIES, DC60V/AC90V 1000MA
⚠ Z860	23144479	PROTECTOR, 125V 4.0A
⚠ Z880	23144194	PROTECTOR, 20PSERIES 125V 4A
⚠ Z881	23144183	PROTECTOR, 20PSERIES 125V 500MA
⚠ Z882	23144194	PROTECTOR, 20PSERIES 125V 4A
⚠ Z883	23144195	PROTECTOR, 20PSERIES 125V 5A
⚠ Z884	23144195	PROTECTOR, 20PSERIES 125V 5A
⚠ Z885	23144195	PROTECTOR, 20PSERIES 125V 5A
⚠ Z8210	23144189	PROTECTOR, 20PSERIES 125V 2A
ZB22B	23103840	FERRITE CORE, TFE1013
PC BOARD ASSEMBLIES		
✻ U101	23762780	PC BOARD ASSY, IF AUD ACIN PU PD1954A
✻ U802	23762781	PC BOARD ASSY, POWER PU PD1955A1
✻ UA02	23762782	PC BOARD ASSY, REMORT SENS PU PD1955A2
✻ UA03	23762783	PC BOARD ASSY, DOOR SW PU PD1955A3
✻ UA06	23762786	PC BOARD ASSY, FRONT KEY PU PD1503B
✻ UD02	23148139	OPSS SCALER 46WM48P, B910PD1962A1
✻ UV01	23762784	PC BOARD ASSY, BACK AV PU PD1956A1
✻ UV03	23762785	PC BOARD ASSY, FRONT AV PU PD1956A2
TUNER		
H001	23321449	TUNER, HYP.EMULT ICPL D-J ALPS TEDE9-243A
H002	23148138	IF MODULE, EURO IMA MSP3410G MVGS52
ACCESSORIES		
A701	23067891	CARTON, TOP CASE 46WM48P
A702	23946863	PACKING, BOTTOM PACKING 46WM48P
A703	23946862	PACKING, TOP PACKING 46WM48P
A704	23067892	CARTON, BOTTOM TRAY 46WM48P
A710	23918393	CARTON, SUPPORT POST 46WM48P
A726	23974753	POLYPROPYLENE BAND
⚠ K902	23306469	REMOCON HAND UNIT, CT-90126
	23306469	REMOCON HAND UNIT, CT-90126
⚠ Y101A	23566517	OWNERS MANUAL, ENGLISH MANUAL ENG 46WM48P
⚠ Y101E	23566518	OWNERS MANUAL, EURO MANUAL EUR 46WM48P
Y102	23589663	SHEET, QSUG 46WM48P QSUG
CABINET PARTS		
⚠ A025	23533145	COVER, LAMP TUNNEL PURCHASE 46WM48P
⚠ A026	23428357	DOOR, DOOR LAMP PURCHASE ASSY 46WM48P
⚠ A101	23533140	COVER, BASE ASSY KIT 46WM48P
⚠ A201	23532777	COVER, BEZEL,PURCHASE ASSEY 46HM84
A204	23532764	COVER, BACK COVER 46HM84
⚠ A205	23532783	COVER, BACKCOVER PURCHASE ASSY 46HM84
A215	23940281	PIECE, ENCLOSURE PROPER KIT 46WM48P
A220	23451976	PUSH CATCH, CLICK
⚠ A222	23532770	COVER, PEDESTAL PURCHASE ASSY
A225	23940084	PIECE, STRIKER
A227	23940287	PIECE, PIECE TRIM TOUCH PAD 46WM48P
⚠ A271	23405422	OPTICAL ENGINE, PJ-TB25-46EU PJ-TB25-46EU
A278	23084267	BRACKET, SPEED CLIP
A305	23717197	SCREW, THUMB SCREW 52HM84
A306	23717198	SCREW, THUMB SCREW RETAINER 52HM84
A333	23079202	AV MOUNT PURCHASE, 46WM48P
⚠ A401	23532768	COVER, REAR COVER PURCHASE ASY
A421	23532738	COVER, REAR COVER,DLE
A422	23084265	BRACKET, VENT, REAR DLE
A516	23717192	SCREW, SCREW, AV BOARD
K501	23311074	SCREEN, 46K4M LENTICULAR SHEET SCREEN46K4ML
K502	23311075	SCREEN, 46K4M FRESNEL SHEET SCREEN46K4MF
K601	23405382	MIRROR, 46C4M3 1047/503*536*3

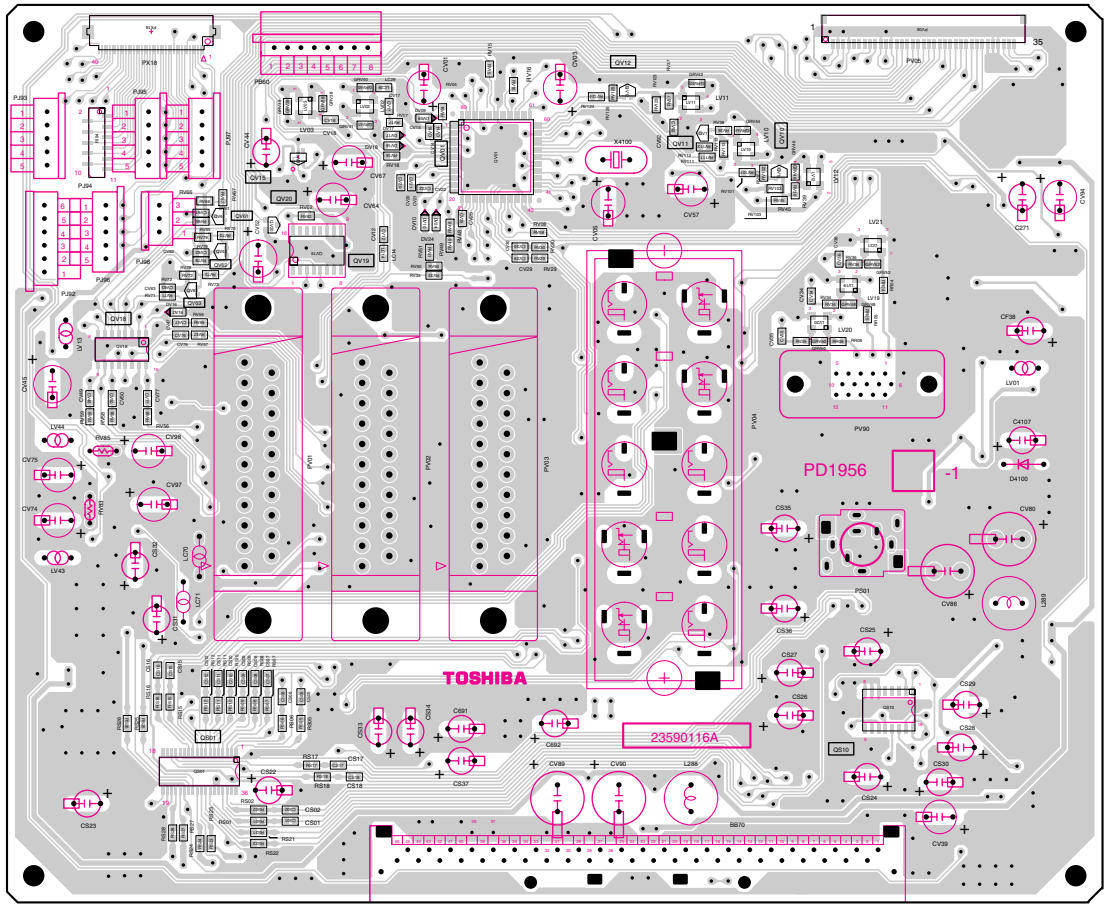
BACK AV BOARD PD1956A1 (UV01)

BOTTOM (FOIL) SIDE



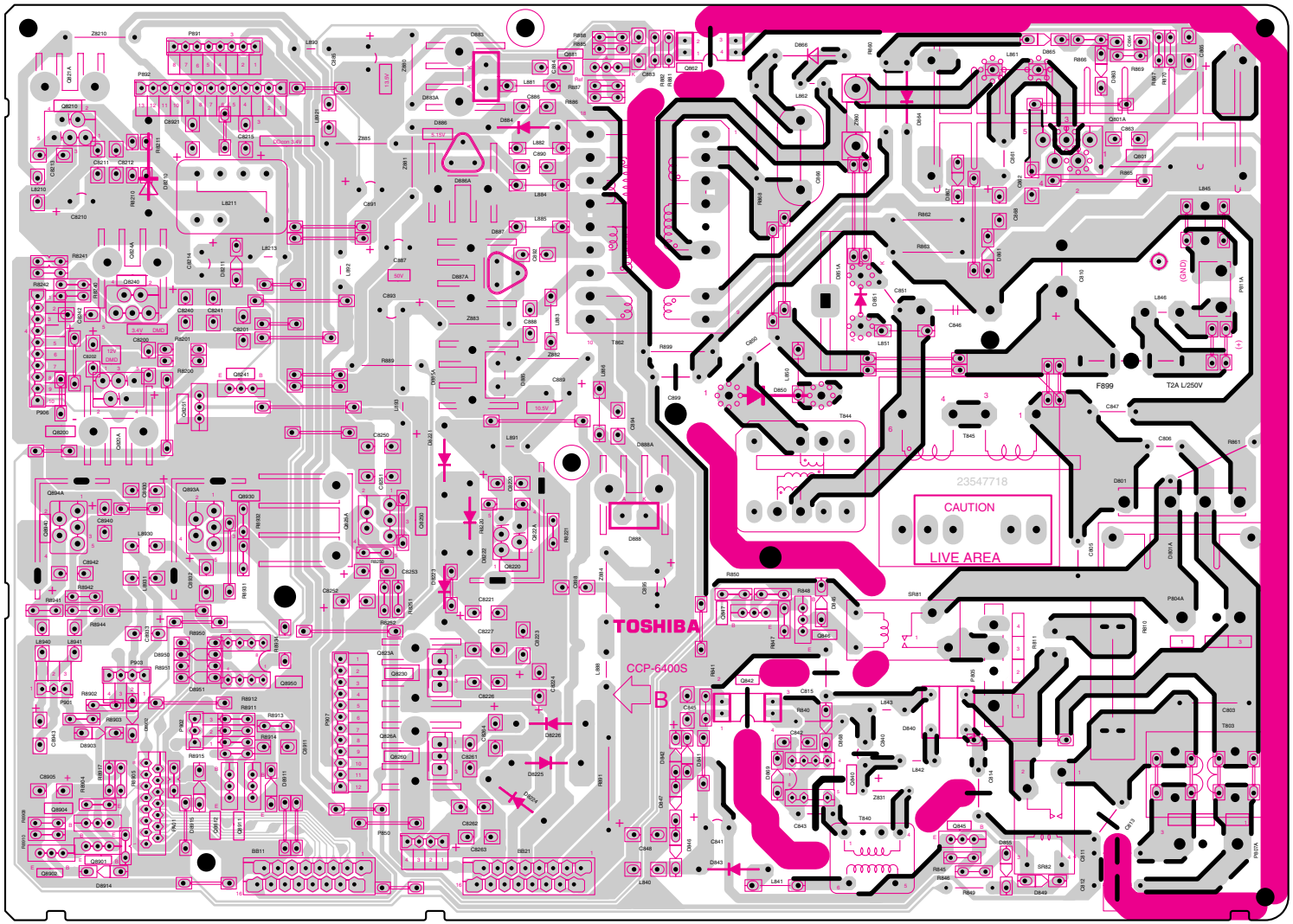
BACK AV BOARD PD1956A1 (UV01)

TOP (COMPONENT) SIDE



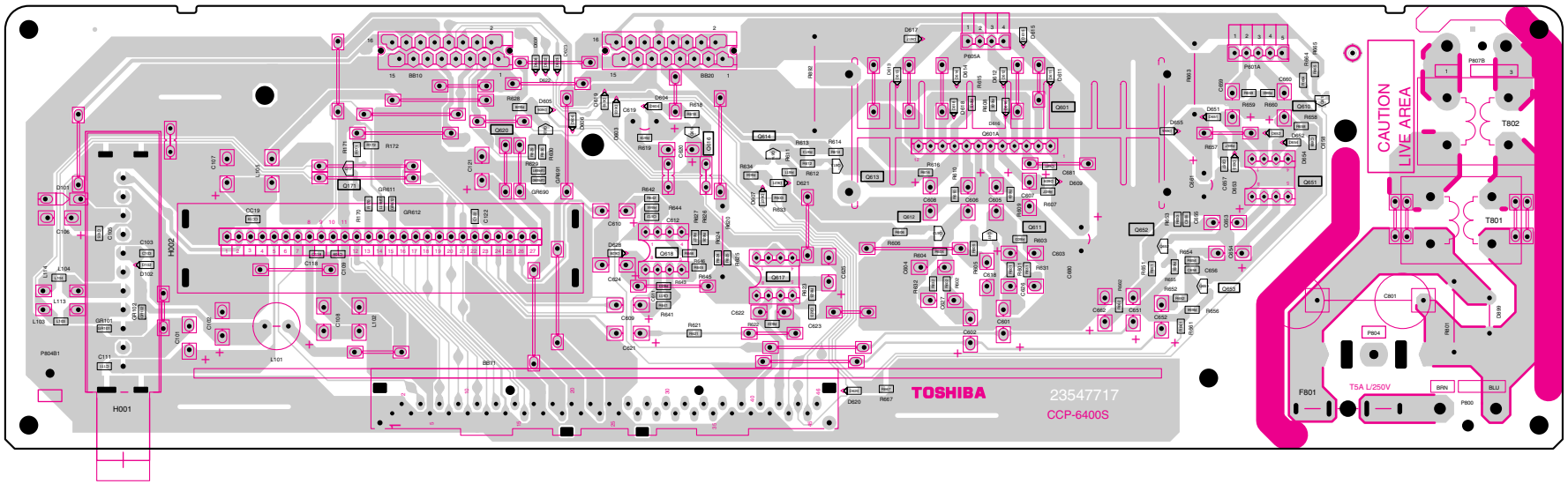
MAIN POWER BOARD PD1955A1 (U802)

BOTTOM (FOIL) SIDE



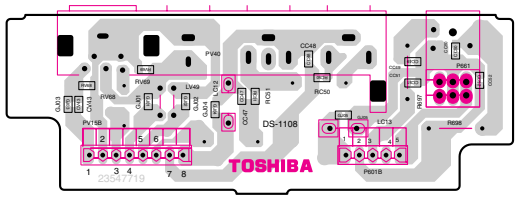
IF AUDIO BOARD PD1954A (U101)

BOTTOM (FOIL) SIDE



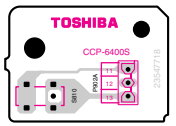
FRONT-AV BOARD PD1956A2 (UV03)

BOTTOM (FOIL) SIDE



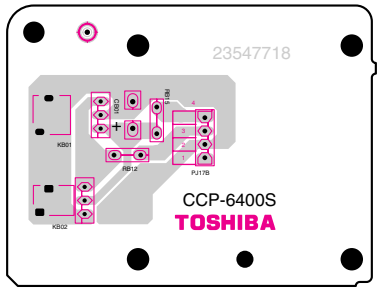
DOOR SWITCH BOARD PD1955A3 (UA03)

BOTTOM (FOIL) SIDE



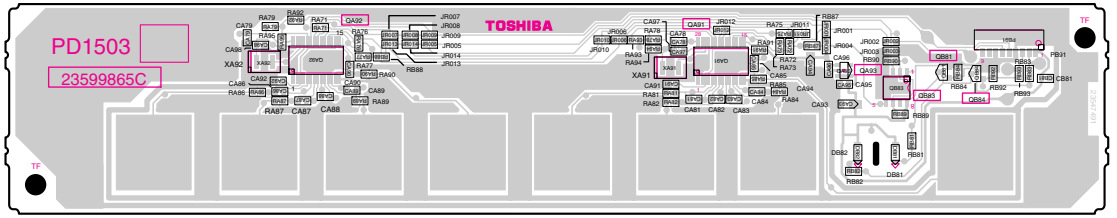
REMOTE SENSOR BOARD PD1955A2 (UA02)

BOTTOM (FOIL) SIDE



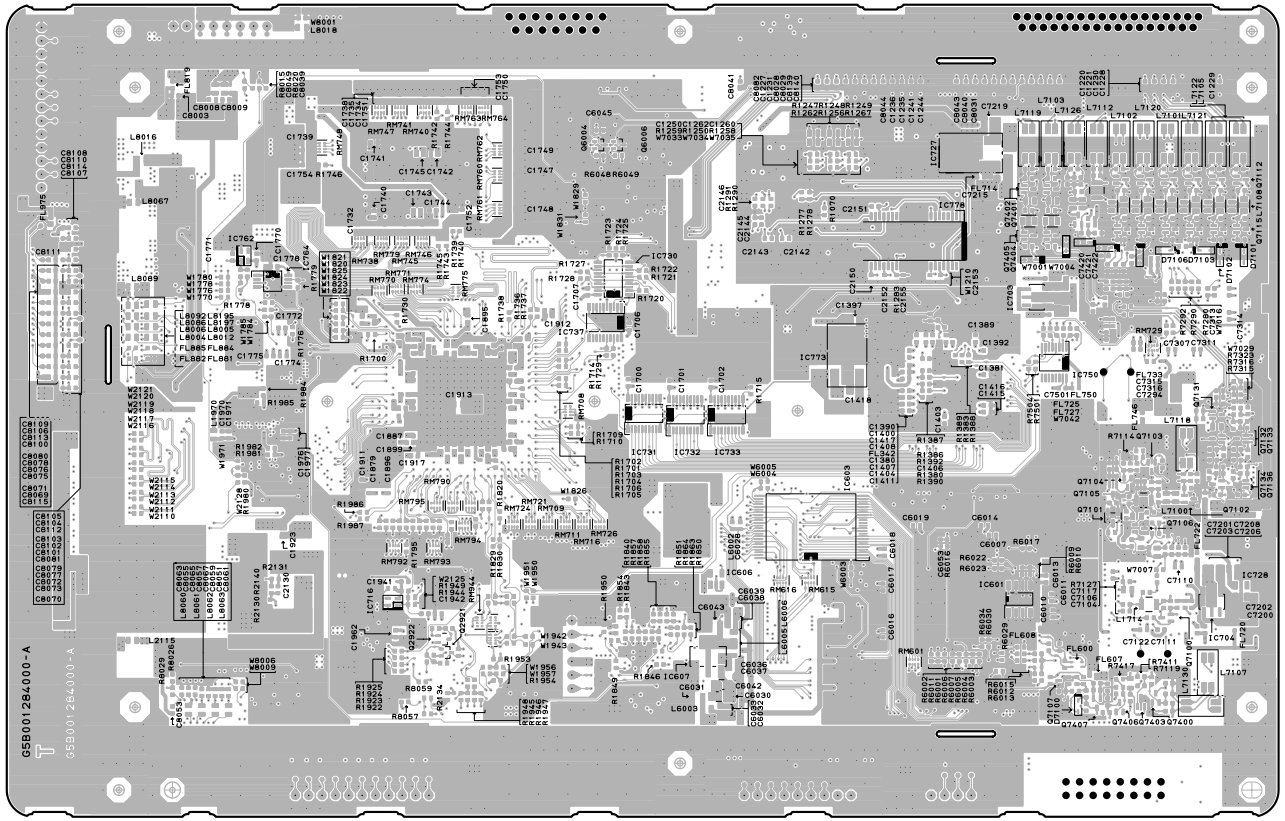
FRONT KEY BOARD PD1503B (UA06)

TOP (COMPONENT) SIDE



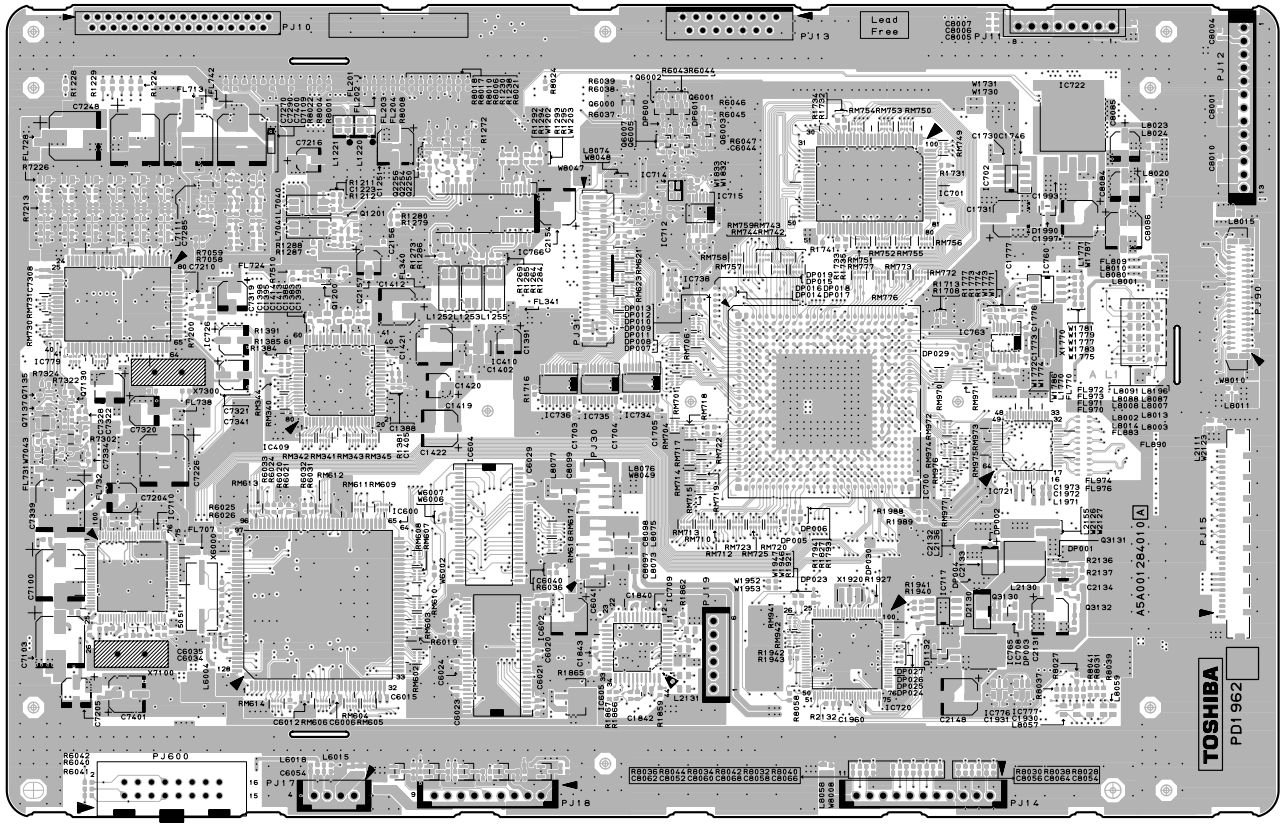
OPSS SCALER BOARD PD1962A1 (UD02)

BOTTOM (FOIL) SIDE



OPSS SCALER BOARD PD1962A1 (UD02)

TOP (COMPONENT) SIDE



SCHEMATIC DIAGRAM

MODEL : 46WM48P

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION", "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" ON THE MANUAL FOR THIS MODEL.

CAUTION: The international hazard symbols "⚠" in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. The mounting position of replacements is to be identical with originals. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE on the MANUAL for this model. Do not degrade the safety of the receiver through improper servicing.

NOTE:

1. RESISTOR Resistance is shown in ohm [K = 1.000, M = 1.000.000]. All resistors are 1/6W and 5% tolerance carbon resistor, unless otherwise noted as the following marks.
   1/2R = Metal or Metal oxide of 1/2 watt 1/2S = Carbon compsistion of 1/2 watt
   1RF = Fuse resistor of 1 watt 10W = Cement of 10 watt
   K = ±10% G = ±2% F = ±1%
2. CAPACITOR Unless otherwise noted in schematic, all capacitor values less than 1 are expressed in μF, and the values more than 1 in pF.
   All capacitors are ceramic 50V, unless otherwise noted as the following marks.
   Electolytic capacitor Mylar capacitor
3. The parts indicated with " ⚠ " have special characteristics, and should be replaced with identical parts only.
4. Voltages read with DIGITAL MULTI-METER from point indicated to chassing ground, using a color bar signal with all controls at normal, line voltage 220 volts.
5. Waveforms are taken receiving color bar signal with enough sensitivity.
6. Voltage reading shown are nominal values and may vary ±20% except H.V.

■ SCHEMATIC DIAGRAM STRUCTURE:

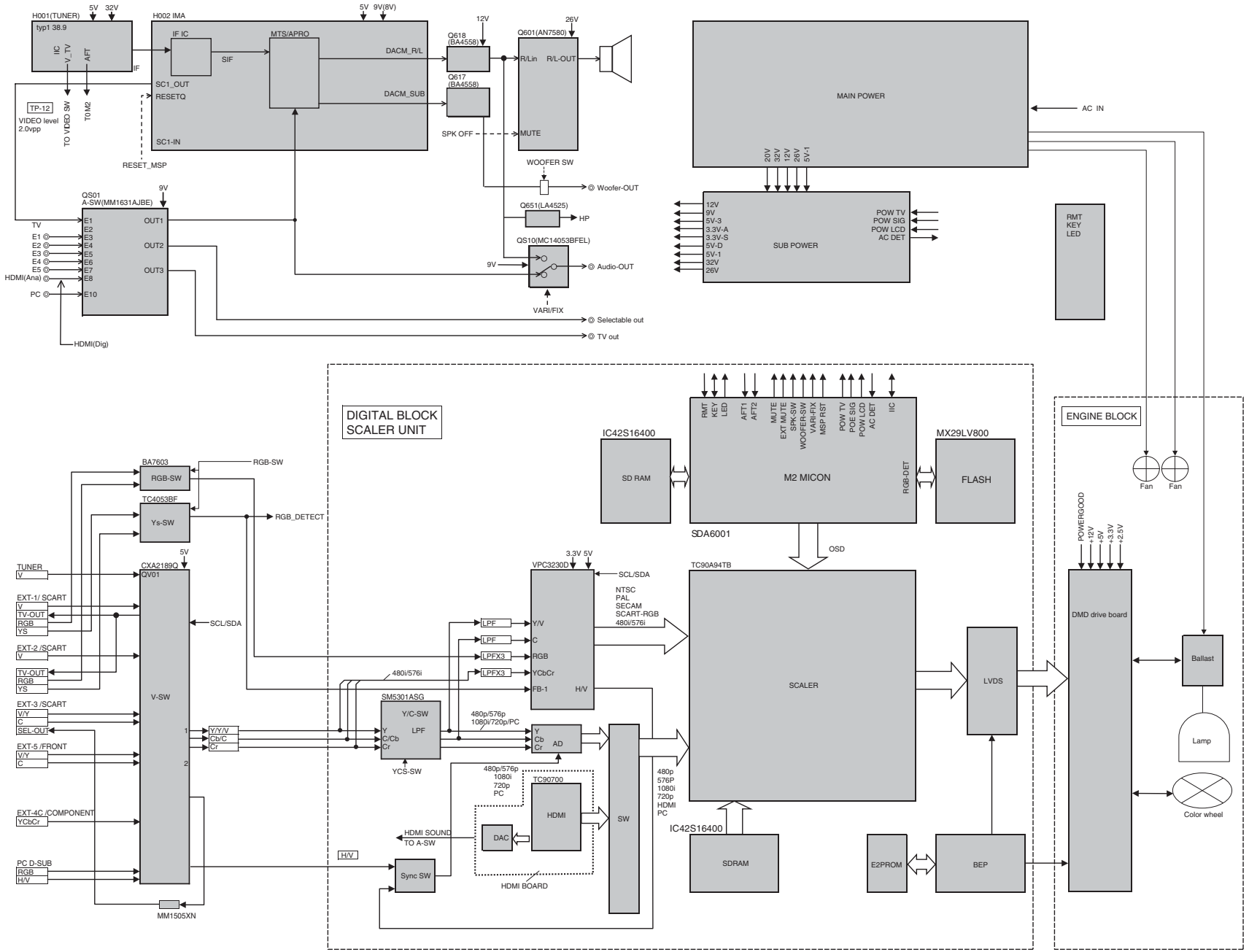
BACK_AV
- (1/6) [SHEET-1/6] 1/57
- (2/6) [SHEET-2/6] 2/57
- (3/6) [SHEET-3/6] 3/57
- (4/6) [SHEET-4/6] 4/57
- (5/6) [SHEET-5/6] 5/57
- (6/6) [SHEET-6/6] 6/57

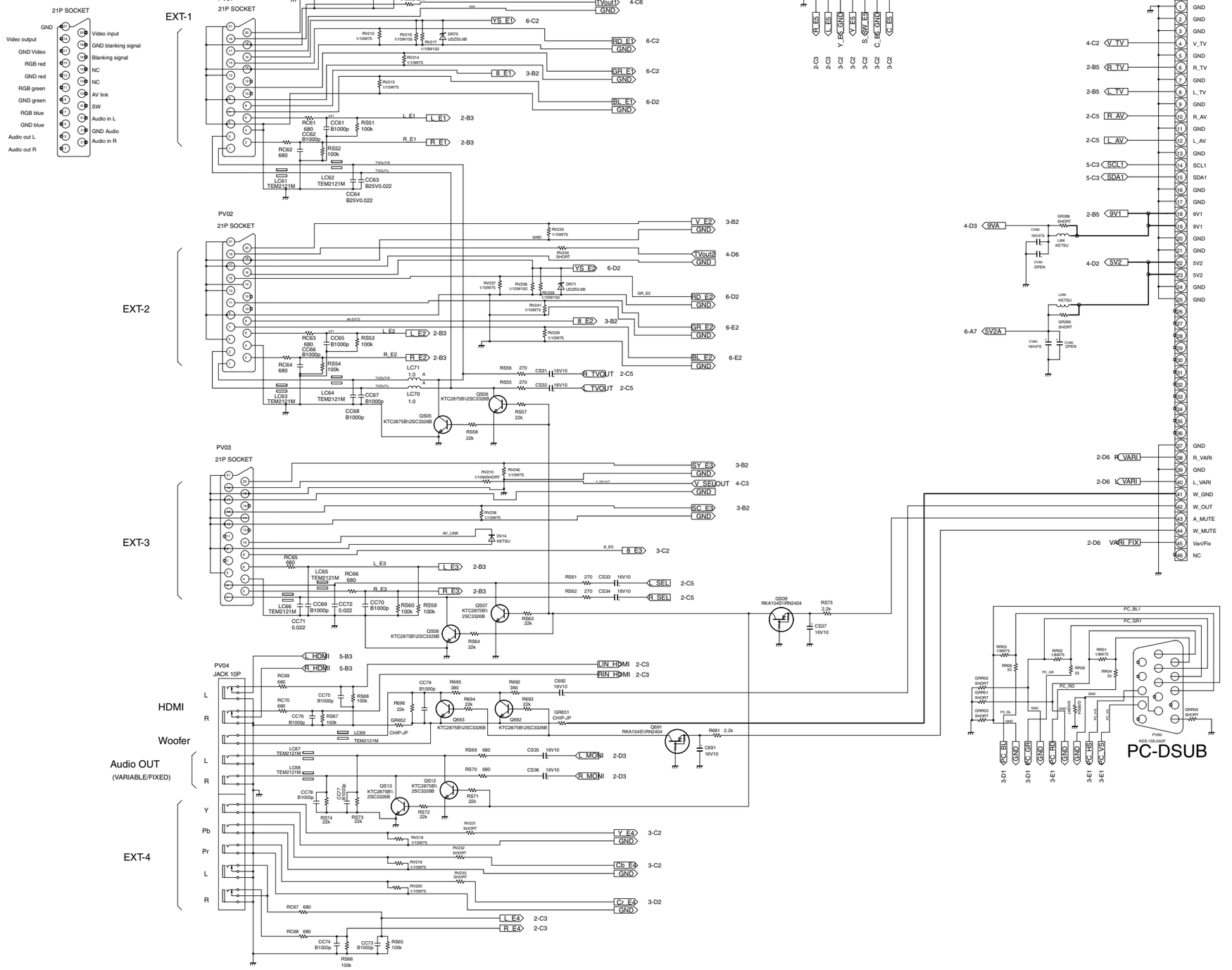
CONNECT__1.eps 7/57
F-AV_1.eps 8/57
FRONT-KEY_1.eps 9/57
IF_AUDIO_AC in
- (1/4) [SHEET-1/4] 10/57
- (2/4) [SHEET-2/4] 11/57
- (3/4) [SHEET-3/4] 12/57
- (4/4) [SHEET-4/4] 13/57

POWER
- (1/2) [SHEET-1/2] 14/57
- (1/2) [SHEET-2/2] 15/57

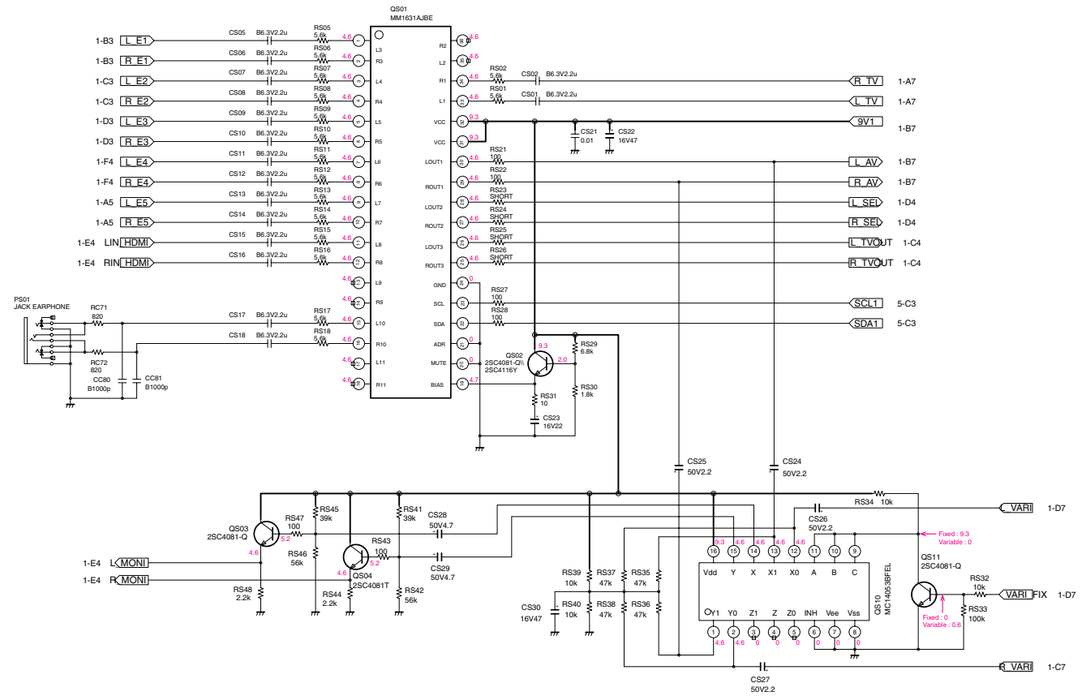
REM_SW_1.eps 16/57
SCALER
- DIGITAL INPUT [SHEET-001] 17/57
- CAPTURE INPUT [SHEET-002] 18/57
- MEMORY CONNECTION [SHEET-003] 19/57
- PLL [SHEET-004] 20/57
- OSD for North America [SHEET-005] 21/57
- IIC [SHEET-006] 22/57
- PLD [SHEET-007] 23/57
- POWER [SHEET-008] 24/57
- SUB MICON (1/3) [SHEET-009] 25/57
- SUB MICON (2/3) [SHEET-010] 26/57
- SUB MICON (3/3) [SHEET-011] 27/57
- LVDS OUT [SHEET-012] 28/57
- Power Connector and Dimming [SHEET-013] 29/57
- LVDS OUT (SHARP LCD) [SHEET-015] 30/57
- 3chADC2_LPF [SHEET-017] 31/57
- 3chADC1 [SHEET-018] 32/57
- DC/DC CONVERTER [SHEET-019] 33/57
- M2
  - (1/6) [SHEET-020] 34/57
  - (2/6) [SHEET-021] 35/57
  - (3/6) [SHEET-022] 36/57
  - (4/6) [SHEET-023] 37/57
  - (5/6) [SHEET-024] 38/57
- FUNCTION
  - (1/8) [SHEET-025] 39/57
- M2
  - (6/6) [SHEET-027] 40/57
- SYNC_SW [SHEET-028] 41/57
- CONNECTOR [SHEET-050] 42/57
- POWER_CONNECTOR [SHEET-051] 43/57
- SERVICE CONNECTOR [SHEET-053] 44/57
- HDMI I/F [SHEET-054] 45/57
- 3DYCS-1 [SHEET-701] 46/57
- 3DYCS-REG [SHEET-702] 47/57
- FUNCTION
  - (2/8) [SHEET-703] 48/57
  - (3/8) [SHEET-704] 49/57
  - (4/8) [SHEET-705] 50/57
  - (5/8) [SHEET-706] 51/57
  - (6/8) [SHEET-707] 52/57
  - (7/8) [SHEET-708] 53/57
  - (8/8) [SHEET-709] 54/57
- TV MICON CONNECTOR (1) [SHEET-801] 55/57
- CONNECTOR (TV MICON-POWER BOARD) [SHEET-802] 56/57
- CONNECTOR (DLE I/F) [SHEET-803] 57/57

CIRCUIT BLOCK DIAGRAM

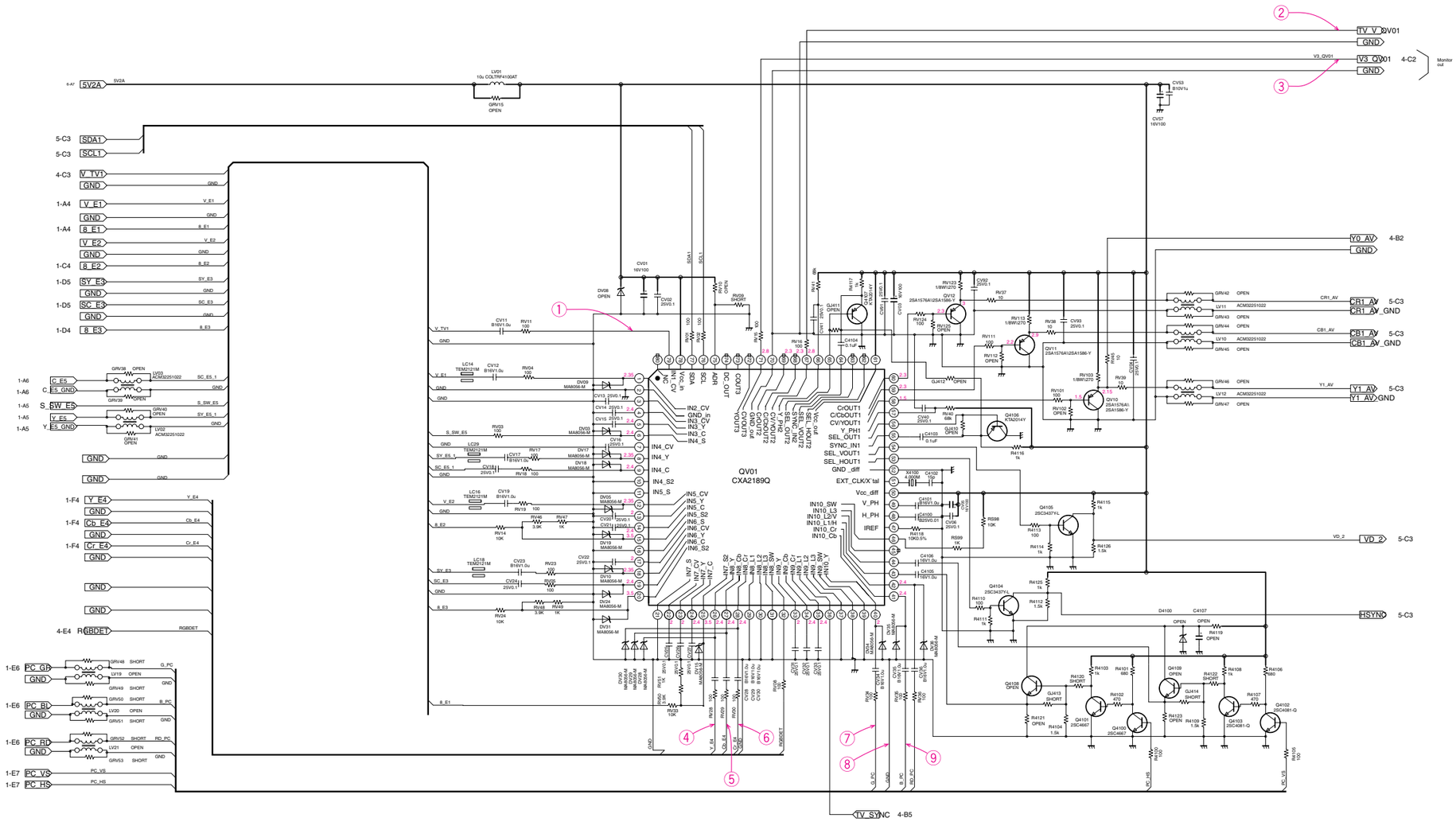


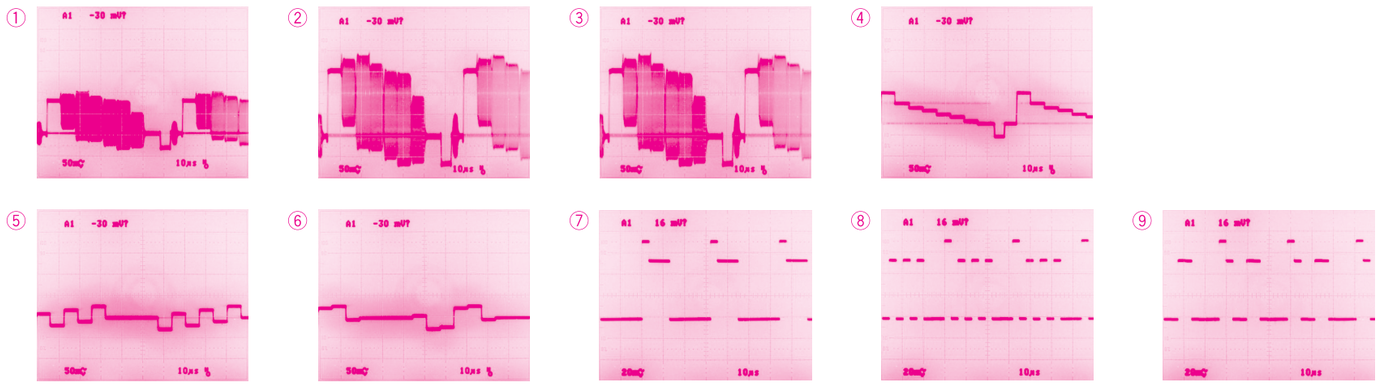

to FRONT (EXT-5)
PB60
PLUG 8P
BB70
PLUG B-B 46P TAIKO
21P SOCKET
GND
Video output
GND Video
RGB red
GND red
RGB green
GND green
RGB blue
GND blue
Audio out L
Audio out R
Video input
GND blanking signal
Blanking signal
NC
NC
AV link
SW
Audio in L
GND Audio
Audio in R
EXT-1
EXT-2
EXT-3
EXT-4
PV01
PV02
PV03
PV04
JACK 10P
HDMI
Woofer
Audio OUT
(VARIABLE/FIXED)
V_E1
TVout1
YS_E1
RD_E1
8_E1
GR_E1
BL_E1
L_E1
R_E1
V_E2
TVout2
YS_E2
RD_E2
GR_E2
8_E2
BL_E2
L_E2
R_E2
SY_E3
V_SELOUT
SC_E3
AV_LINK
8_E3
L_E3
R_E3
SEL
L_HDMI
R_HDMI
LIN_HDMI
RIN_HDMI
L_MONI
R_MONI
Y_E4
Cb_E4
Cr_E4
L_E4
R_E4
PC_BL
PC_GR
PC_RD
PC_HS
PC_VS
PC-DSUB
KES-15S-2A5F
V_TV
R_TV
L_TV
R_AV
L_AV
SCL1
SDA1
9V1
9VA
5V2
5V2A
R_VARI
L_VARI
VARI_FIX
W_GND
W_OUT
A_MUTE
W_MUTE
Vari/Fix
NC
46WM48P
BACK AV (1/6)
SHEET-1/6

(1/57)

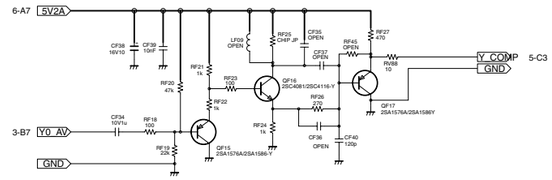


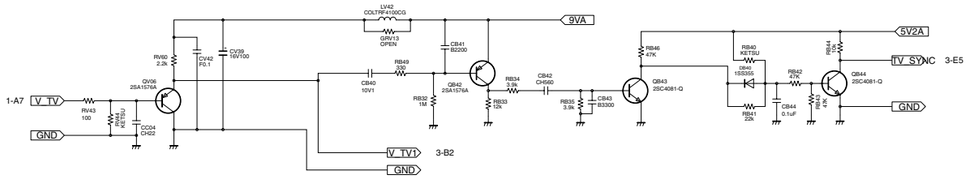
46WM48P
BACK AV (2/6)
SHEET-2/6

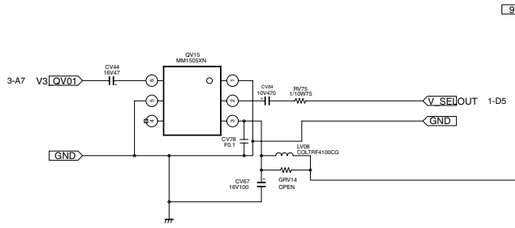


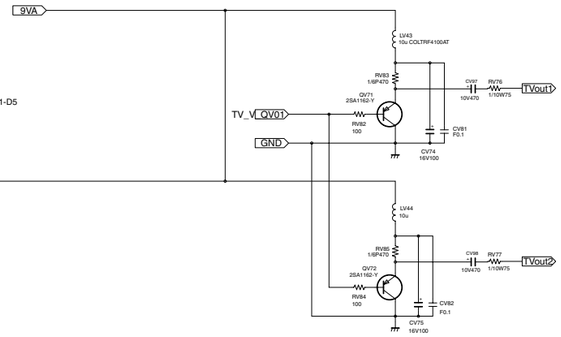


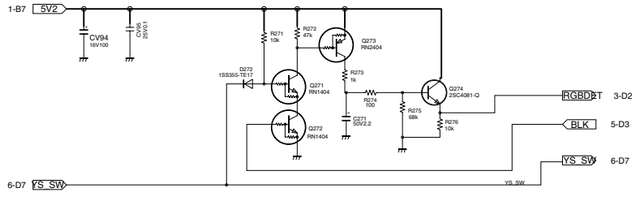
46WM48P
BACK AV (3/6)
SHEET-3/6







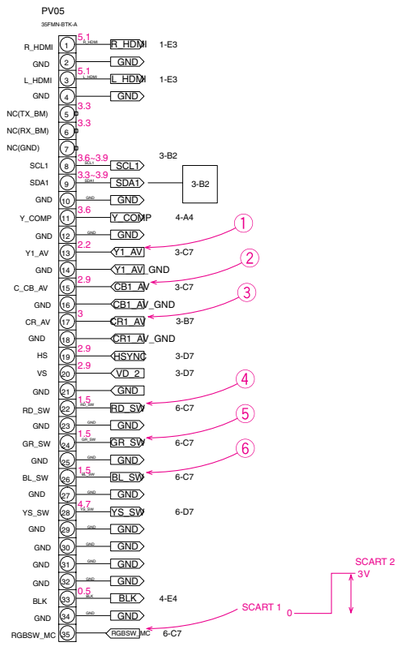




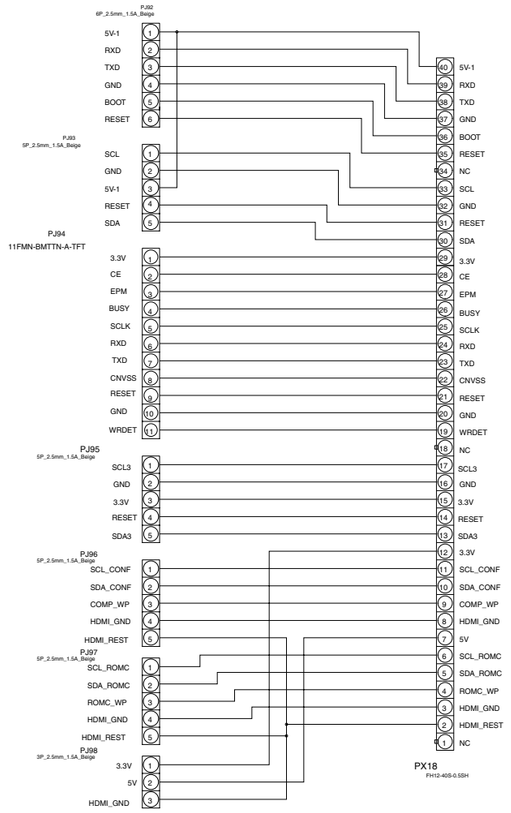
46WM48P
BACK AV (4/6)
SHEET-4/6

SCALER

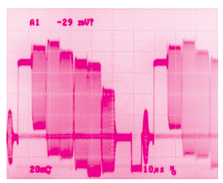
35P-FFC



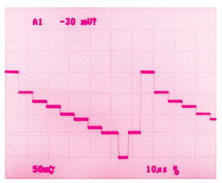
Wright Conection



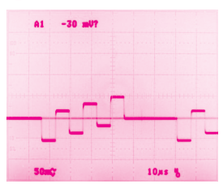
① RF input



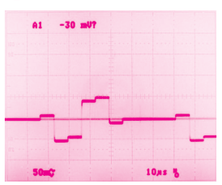
① R-Y, B-Y input



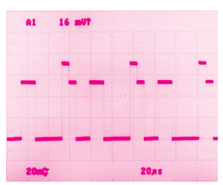
②



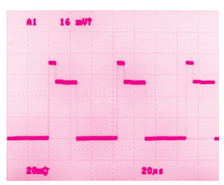
③



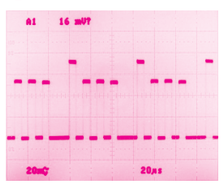
④



⑤

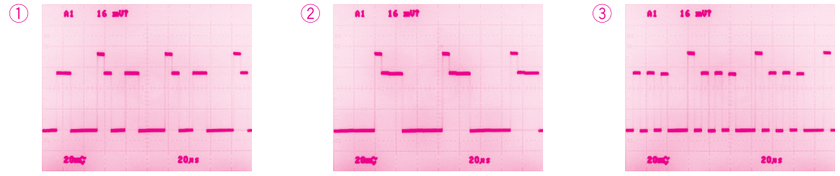


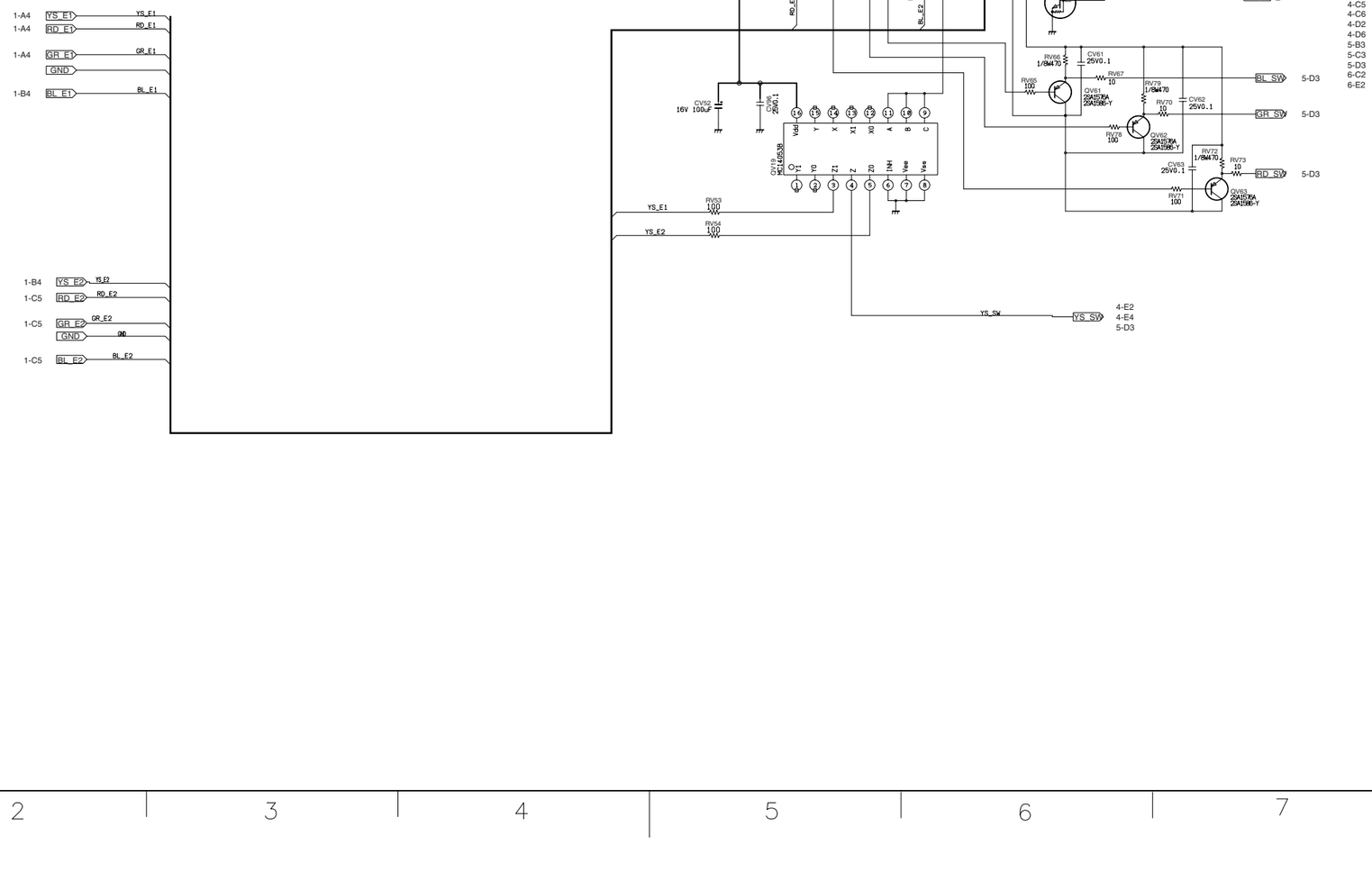
⑥



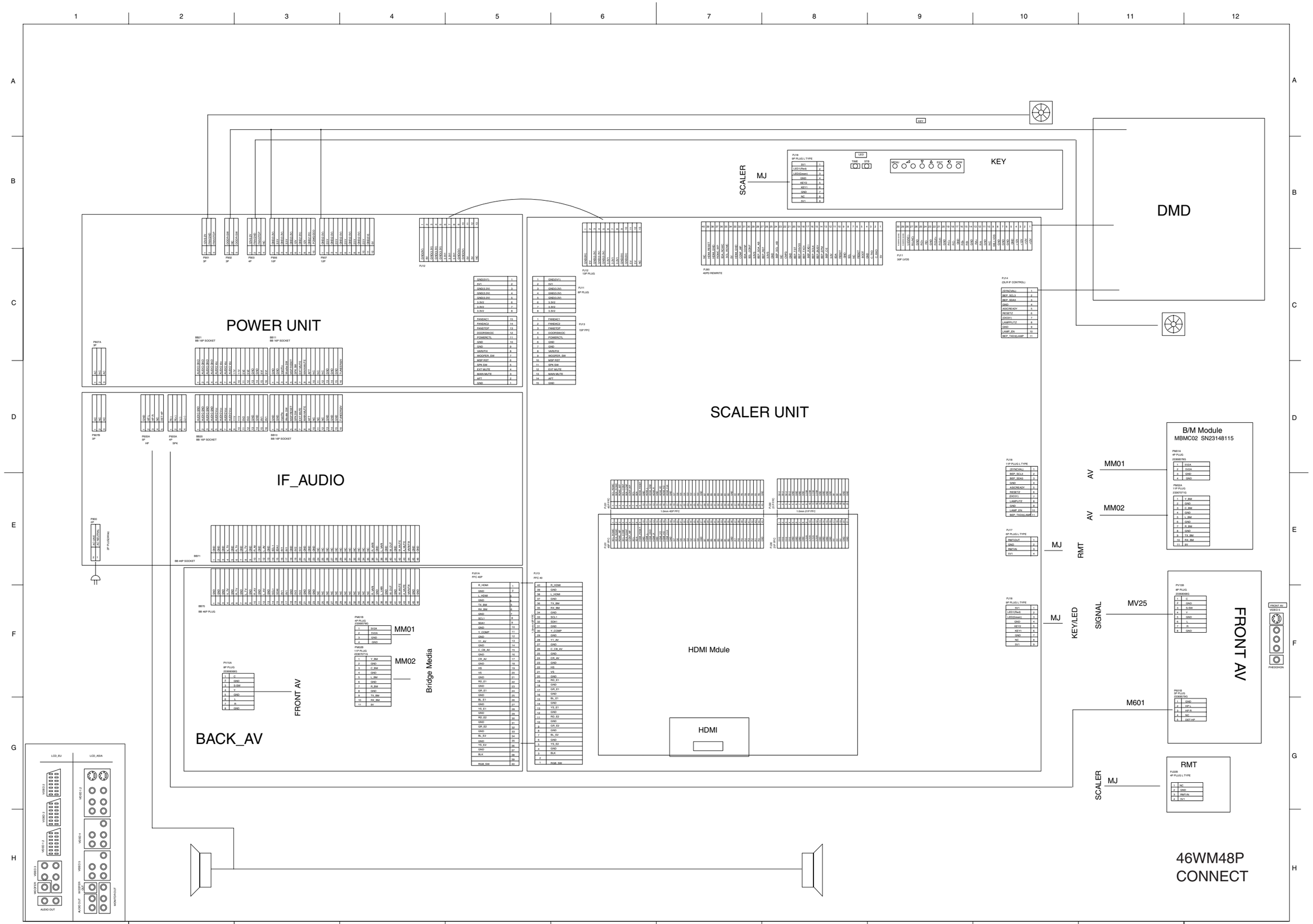
NV04
NV06
NV07
NV08
NV12
NV13

46WM48P
BACK AV (5/6)
SHEET-5/6

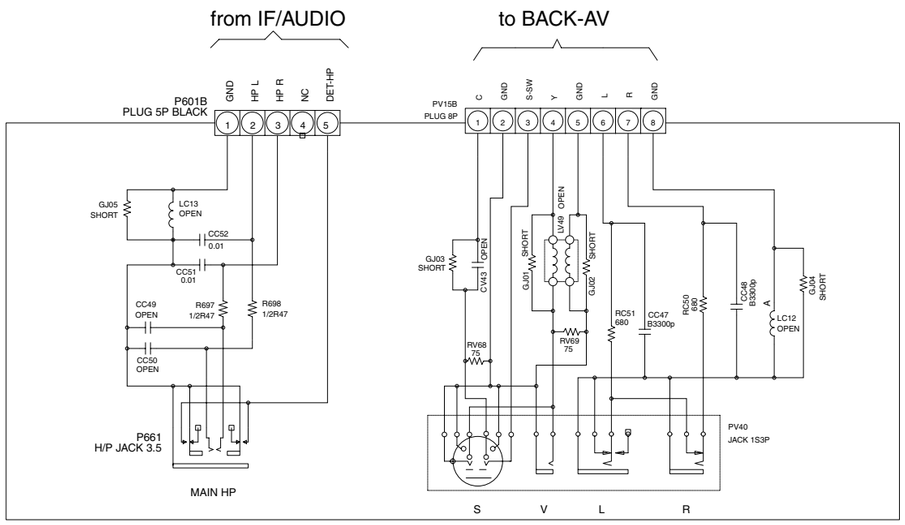




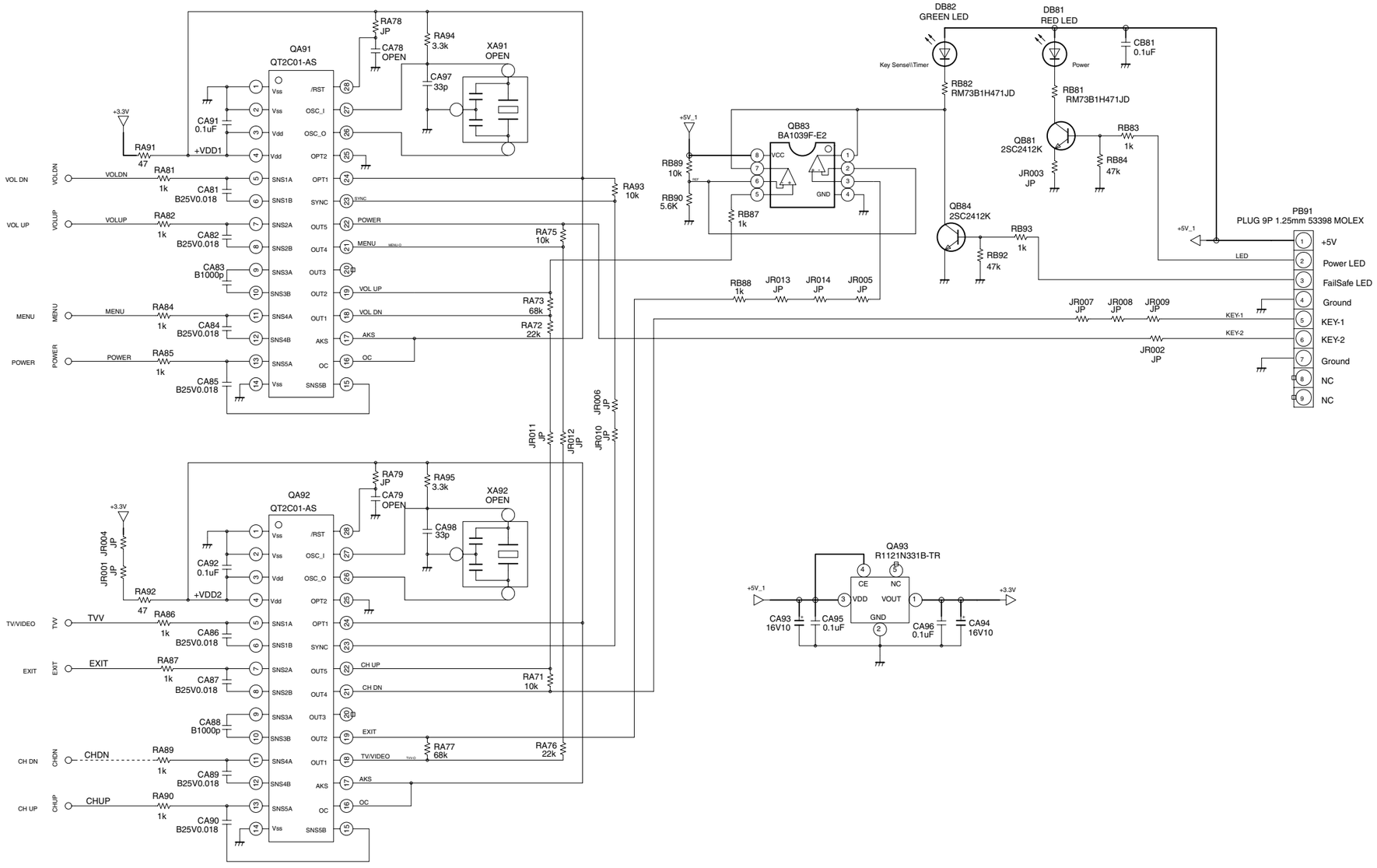
46WM48P
BACK AV (6/6)
SHEET-6/6


POWER UNIT
SCALER UNIT
IF_AUDIO
BACK_AV
HDMI Mdule
HDMI
Bridge Media
DMD
KEY
SCALER
MJ
KEY
FRONT AV
B/M Module
MBMC02 SN23148115
MM01
MM02
AV
RMT
MJ
KEY/LED
SIGNAL
MV25
FRONT AV
M601
SCALER
MJ
RMT
46WM48P
CONNECT

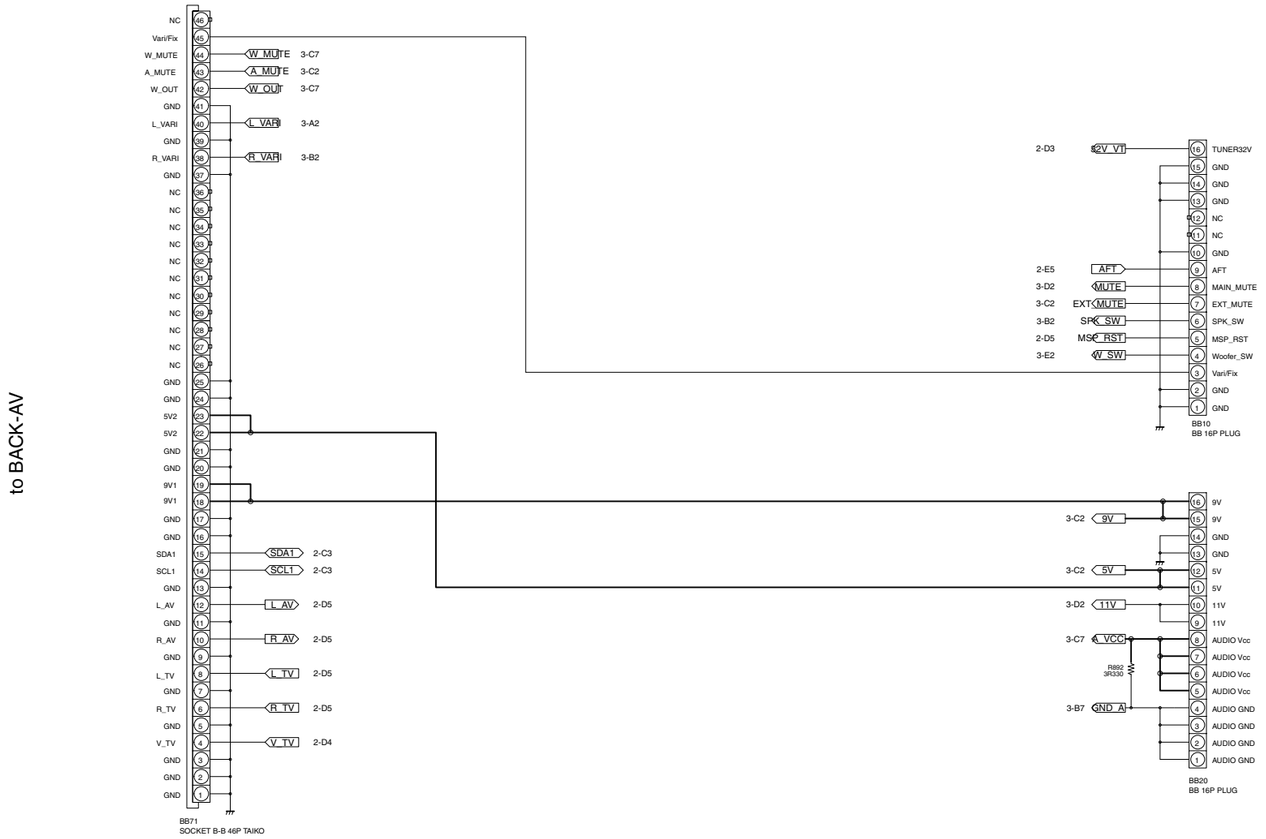
FRONT-AV PD1956A2



46WM48P
FRONT-AV

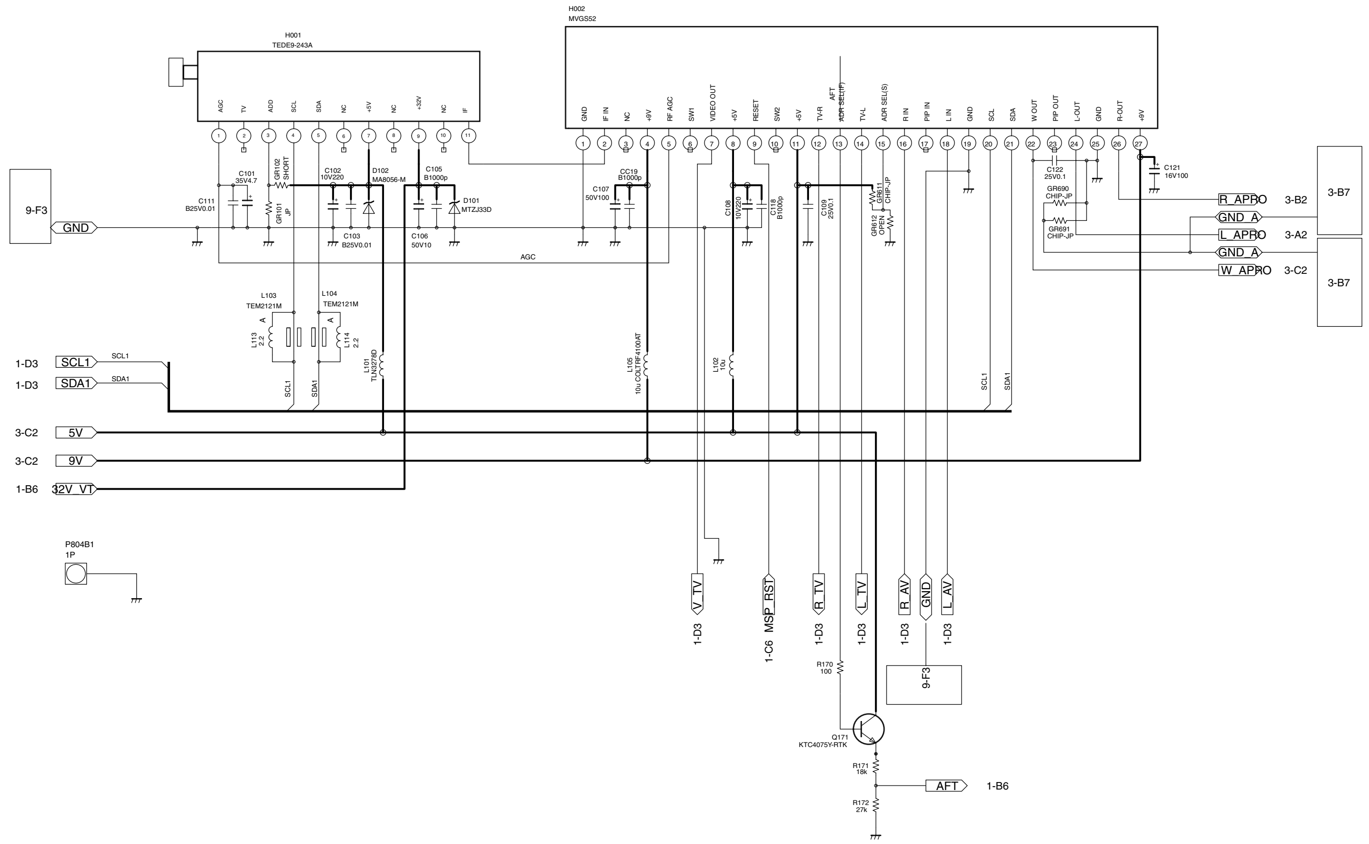


46WM48P
FRONT-KEY



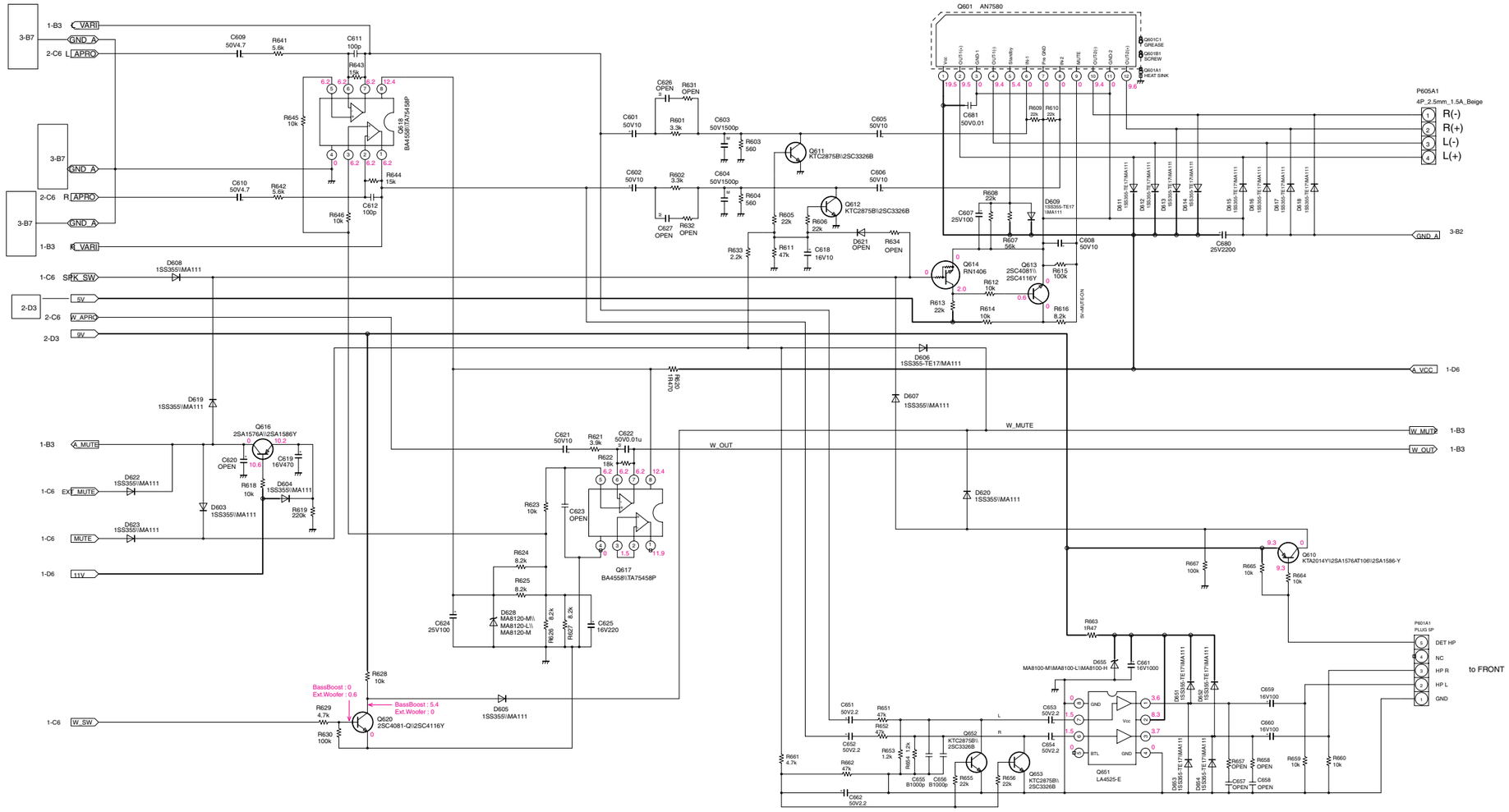
46WM48P
IF AUDIO AC in (1/4)
SHEET-1/4

(10/57)

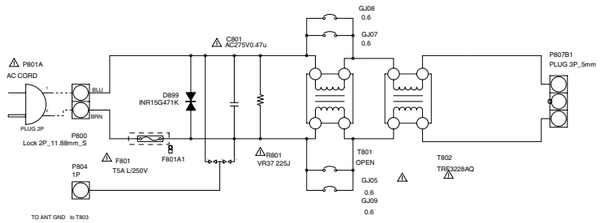


H001
TEDE9-243A
AGC
TV
ADD
SCL
SDA
NC
+5V
NC
+32V
NC
IF
H002
MVGS52
GND
IF IN
NC
+9V
RF AGC
SW1
VIDEO OUT
+5V
RESET
SW2
+5V
TV-R
AFT
ADR SEL(IF)
TV-L
ADR SEL(S)
R IN
PIP IN
L IN
GND
SCL
SDA
W OUT
PIP OUT
L-OUT
GND
R-OUT
+9V
C101 35V4.7
C111 B25V0.01
GR102 SHORT
GR101 JP
C102 10V220
C103 B25V0.01
D102 MA8056-M
C105 B1000p
C106 50V10
D101 MTZJ33D
C107 50V100
CC19 B1000p
C108 10V220
C118 B1000p
C109 25V0.1
GR611 CHIP-JP
GR612 OPEN
C122 25V0.1
GR690 CHIP-JP
GR691 CHIP-JP
C121 16V100
AGC
9-F3
GND
R_APRO
3-B2
GND_A
L_APRO
3-A2
GND_A
W_APRO
3-C2
3-B7
3-B7
L103 TEM2121M
L104 TEM2121M
L113 2.2
L114 2.2
L101 TLN3278D
L105 10u COLTRF4100AT
L102 10u
SCL1
SDA1
1-D3 SCL1
1-D3 SDA1
3-C2 5V
3-C2 9V
1-B6 32V_VT
P804B1 1P
V_TV 1-D3
MSP_RST 1-C6
R_TV 1-D3
L_TV 1-D3
R_AV 1-D3
GND
L_AV 1-D3
9-F3
R170 100
Q171 KTC4075Y-RTK
R171 18k
R172 27k
AFT 1-B6

46WM48P
IF AUDIO AC in (2/4)
SHEET-2/4



46WM48P
IF AUDIO AC in (3/4)
SHEET-3/4



LIVE AREA

N614
N617
N618
PH87
PH88

46WM48P
IF AUDIO AC in (4/4)
SHEET-4/4

LIVE AREA

BALLAST

CHINA PFC

PLUG 4P

Thermo

P805

BREAKER

AC IN

P807A

50V

13.5V

10.5V

5.15V

3.5V

AUDIO

AUDVCC

AUDGND

5V1

POW

2-C6

2-B4

2-C4

2-D4

2-E4

2-E7

2-E7

2-A2

2-B2

D851 FMG-3CS

T845 TPW2059AL

T844 TPW2054AH

T803 TRF3228ARV TRF3228AQ

T802 22217682 TPW3933AS

T840 TPW3541AH

Q801 STR-F6268S

Q862 TLP421(GR)

Q842 TLP421(GR)

Q840 MIP290

Q847 KTC3198Y

Q846 KTC3198Y

Q845 KTC3198Y

Q881 NJM431L

SR81 23146574

SR82 23146564/23146573

Z881 125V_500mA

Z880 125V_4A

Z882 125V_4A

Z885 125V_5A

Z893 125V_5A

Z894 125V_5A

Z831 PRF1005PRT

Z860 PRF4000

D801 D5SB60 23477674/23476668

D840 LN1WBA60

D841 RD5.6ESAB3

D842 MTZJ4.7B

D847 RD3.0ESAB2

D846 RD3.0ESAB2

D850 RG4C

D850 MTZJ6.2B

L850 TEM2011AA

L890 TLN3490GH

L891 TLN3490GH

L893 TLN3490GH

L888 TLN3462AH

L840 22

L842 TLN3481GH

L843 TLN3481GH

L841 TEM2011AA

CHASSIS GND

PH89 PH90 NB14 NB17 NB18

① ②

Magnification

46WM48P
MAIN POWER (1/2)
SHEET-1/2

G-Hyper.Dbep G-Hyper.Dbep G-Hyper.Dbep

DMD

DMD

IF AUDIO

IF AUDIO

FAN

SUB POWER

DDcon 3.4V

2.6V DMD

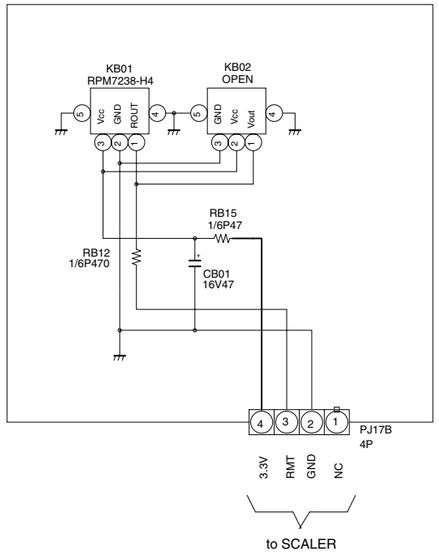
3.4V DMD

FIN OPEN

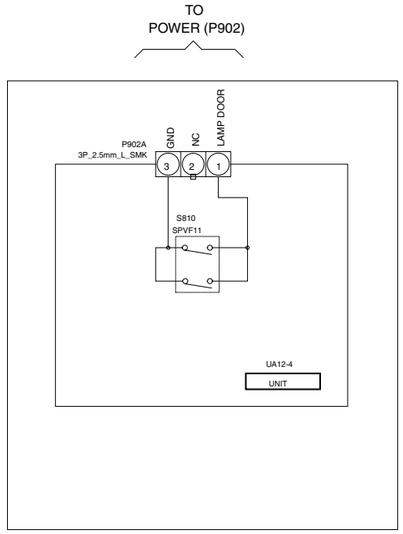
46WM48P
MAIN POWER (2/2)
SHEET-2/2

A

REM PD1955A2

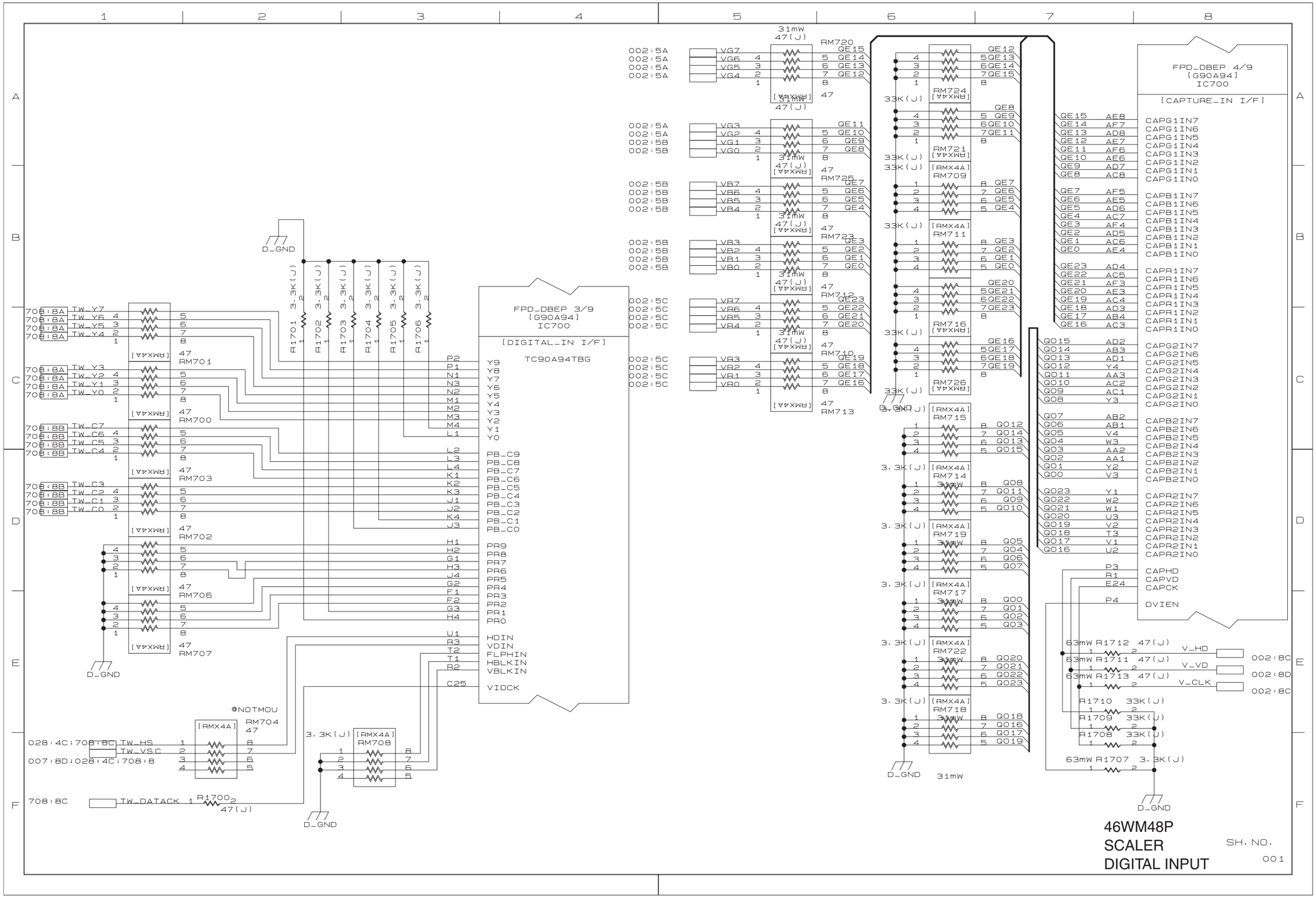


SHUT SW-1 PD1955A3



B

46WM48P
REM_SW


FPD_DBEP 3/9
[G90A94]
IC700
[DIGITAL_IN I/F]
TC90A94TBG
FPD_DBEP 4/9
[G90A94]
IC700
[CAPTURE_IN I/F]
D_GND
R1701 3.3K(J)
R1702 3.3K(J)
R1703 3.3K(J)
R1704 3.3K(J)
R1705 3.3K(J)
R1706 3.3K(J)
RM701 47
RM700 47
RM703 47
RM702 47
RM706 47
RM707 47
TW_Y7
TW_Y6
TW_Y5
TW_Y4
TW_Y3
TW_Y2
TW_Y1
TW_Y0
TW_C7
TW_C6
TW_C5
TW_C4
TW_C3
TW_C2
TW_C1
TW_C0
P2
P1
N1
N3
N2
M1
M2
M3
M4
L1
L2
L3
L4
K1
K2
K3
J1
J2
K4
J3
H1
H2
G1
H3
J4
G2
F1
F2
G3
H4
U1
R3
T2
T1
R2
C25
PB_C9
PB_C8
PB_C7
PB_C6
PB_C5
PB_C4
PB_C3
PB_C2
PB_C1
PB_C0
PR9
PR8
PR7
PR6
PR5
PR4
PR3
PR2
PR1
PR0
HDIN
VDIN
FLPHIN
HBLKIN
VBLKIN
VIDCK
@NOTMOU
RM704 47
TW_HS
TW_VSC
TW_DATACK
R1700 47(J)
RM708 3.3K(J)
RM720 31mW 47(J)
RM724 33K(J)
RM721 33K(J)
RM709 33K(J)
RM711 33K(J)
RM716 33K(J)
RM726 33K(J)
RM715 3.3K(J)
RM714 3.3K(J)
RM719 3.3K(J)
RM717 3.3K(J)
RM722 3.3K(J)
RM718 3.3K(J)
RM725 31mW 47(J)
RM723 31mW 47(J)
RM712 31mW 47(J)
RM710 31mW 47(J)
RM713 31mW 47(J)
VG7
VG6
VG5
VG4
VG3
VG2
VG1
VG0
VB7
VB6
VB5
VB4
VB3
VB2
VB1
VB0
VR7
VR6
VR5
VR4
VR3
VR2
VR1
VR0
002:5A
002:5B
002:5C
QE15
QE14
QE13
QE12
QE11
QE10
QE9
QE8
QE7
QE6
QE5
QE4
QE3
QE2
QE1
QE0
QE23
QE22
QE21
QE20
QE19
QE18
QE17
QE16
QO15
QO14
QO13
QO12
QO11
QO10
QO9
QO8
QO7
QO6
QO5
QO4
QO3
QO2
QO1
QO0
QO23
QO22
QO21
QO20
QO19
QO18
QO17
QO16
AE8
AF7
AD8
AE7
AF6
AE6
AD7
AC8
AF5
AE5
AD6
AC7
AF4
AD5
AC6
AE4
AD4
AC5
AF3
AE3
AC4
AD3
AB4
AC3
AD2
AB3
AD1
Y4
AA3
AC2
AC1
Y3
AB2
AB1
Y4
W3
AA2
AA1
Y2
V3
Y1
W2
W1
U3
V2
T3
V1
U2
CAPG1IN7
CAPG1IN6
CAPG1IN5
CAPG1IN4
CAPG1IN3
CAPG1IN2
CAPG1IN1
CAPG1IN0
CAPB1IN7
CAPB1IN6
CAPB1IN5
CAPB1IN4
CAPB1IN3
CAPB1IN2
CAPB1IN1
CAPB1IN0
CAPR1IN7
CAPR1IN6
CAPR1IN5
CAPR1IN4
CAPR1IN3
CAPR1IN2
CAPR1IN1
CAPR1IN0
CAPG2IN7
CAPG2IN6
CAPG2IN5
CAPG2IN4
CAPG2IN3
CAPG2IN2
CAPG2IN1
CAPG2IN0
CAPB2IN7
CAPB2IN6
CAPB2IN5
CAPB2IN4
CAPB2IN3
CAPB2IN2
CAPB2IN1
CAPB2IN0
CAPR2IN7
CAPR2IN6
CAPR2IN5
CAPR2IN4
CAPR2IN3
CAPR2IN2
CAPR2IN1
CAPR2IN0
CAPHD
CAPVD
CAPCK
DVIEN
R1712 47(J)
R1711 47(J)
R1713 47(J)
R1710 33K(J)
R1709 33K(J)
R1708 33K(J)
R1707 3.3K(J)
V_HD
V_VD
V_CLK
002:8C
002:8D
002:8C
708:8A
708:8B
708:8C
028:4C:708:8C
007:8D:028:4C:708:8
31mW
46WM48P
SCALER
DIGITAL INPUT
SH. NO.
001

VG7. VG6. VG5. VG4. VG3. VG2. VG1. VG0. VB7. VB6. VB5. VB4. VB3. VB2. VB1. VB0. VR7. VR6. VR5. VR4. VR3. VR2. VR1. VR0

63mW330(J) R1715 — D_GND — [EC574] IC731 — EN, C1 — 1D [0] ▷ ▽ [1] [2] [3] [4] [5] [6] [7] [VCC] [GND] — 0.01U C1700

018:8C AD_G7 018:8C AD_G6 018:8C AD_G5 018:8C AD_G4 018:8C AD_G3 018:8D AD_G2 018:8D AD_G1 018:8D AD_G0 → VG7 VG6 VG5 VG4 VG3 VG2 VG1 VG0

63mW330(J) R1716 — D_GND — [EC574] IC734 — EN, C1 — 1D [0] ▷ ▽ [1] [2] [3] [4] [5] [6] [7] [VCC] [GND] — 0.01U C1705

054:7A HD_G7 054:7A HD_G6 054:7B HD_G5 054:7B HD_G4 054:7B HD_G3 054:7B HD_G2 054:7B HD_G1 054:7B HD_G0 → VG7 VG6 VG5 VG4 VG3 VG2 VG1 VG0

VG7 VG7 VG6 VG6 VG5 VG5 VG4 VG4 — 001:5A

VG3 VG3 VG2 VG2 VG1 VG1 VG0 VG0 — 001:5A

[EC574] IC732 — EN, C1 — 1D [0] ▷ ▽ [1] [2] [3] [4] [5] [6] [7] [VCC] [GND] — 0.01U C1701

018:8D AD_B7 018:8D AD_B6 018:8D AD_B5 018:8D AD_B4 018:8D AD_B3 018:8D AD_B2 018:8D AD_B1 018:8D AD_B0 → VB7 VB6 VB5 VB4 VB3 VB2 VB1 VB0

[EC574] IC735 — EN, C1 — 1D [0] ▷ ▽ [1] [2] [3] [4] [5] [6] [7] [VCC] [GND] — 0.01U C1704

054:7B HD_B7 054:7B HD_B6 054:7C HD_B5 054:7C HD_B4 054:7C HD_B3 054:7C HD_B2 054:7C HD_B1 054:7C HD_B0 → VB7 VB6 VB5 VB4 VB3 VB2 VB1 VB0

VB7 VB7 VB6 VB6 VB5 VB5 VB4 VB4 — 001:5B

VB3 VB3 VB2 VB2 VB1 VB1 VB0 VB0 — 001:5B

[EC574] IC733 — EN, C1 — 1D [0] ▷ ▽ [1] [2] [3] [4] [5] [6] [7] [VCC] [GND] — 0.01U C1702

018:8B AD_R7 018:8B AD_R6 018:8B AD_R5 018:8B AD_R4 018:8C AD_R3 018:8C AD_R2 018:8C AD_R1 018:8C AD_R0 → VR7 VR6 VR5 VR4 VR3 VR2 VR1 VR0

3.3VS_2 — D_GND

[EC574] IC736 — EN, C1 — 1D [0] ▷ ▽ [1] [2] [3] [4] [5] [6] [7] [VCC] [GND] — 0.01U C1703

054:7C HD_R7 054:7C HD_R6 054:7D HD_R5 054:7D HD_R4 054:7D HD_R3 054:7D HD_R2 054:7D HD_R1 054:7D HD_R0 → VR7 VR6 VR5 VR4 VR3 VR2 VR1 VR0

3.3VS_2 — D_GND

VR7 VR7 VR6 VR6 VR5 VR5 VR4 VR4 — 001:5B

VR3 VR3 VR2 VR2 VR1 VR1 VR0 VR0 — 001:5C

011:8D AD_HDMI — 63mW33(J) R1726 — 3.3VS_2 — 0.01U C1708 — D_GND

[7SHU04] IC738 — [Vcc] [Vss] [NC] — TC7SHU04FU(TE85L)

V_CLK — 001:8E

63mW75(J) R1727 — V_CLK

63mW33(J) R1729 — V_HD — 001:8E

63mW75(J) R1728

63mW33(J) R1714 — V_VD — 001:8E

[EC244] IC730 — EN1, EN2 — [0] [1] [2] [3] [0] [1] [2] [3] [Vcc] [Vss] — 0.01U C1707 — D_GND

018:7A AD_DATACK — 63mW33(J) R1720

018:7B AD_HS — 63mW33(J) R1721

018:7B AD_VS — 63mW33(J) R1722

054:7A HD_VD — 63mW33(J) R1723

054:7A HD_HD — 63mW33(J) R1724

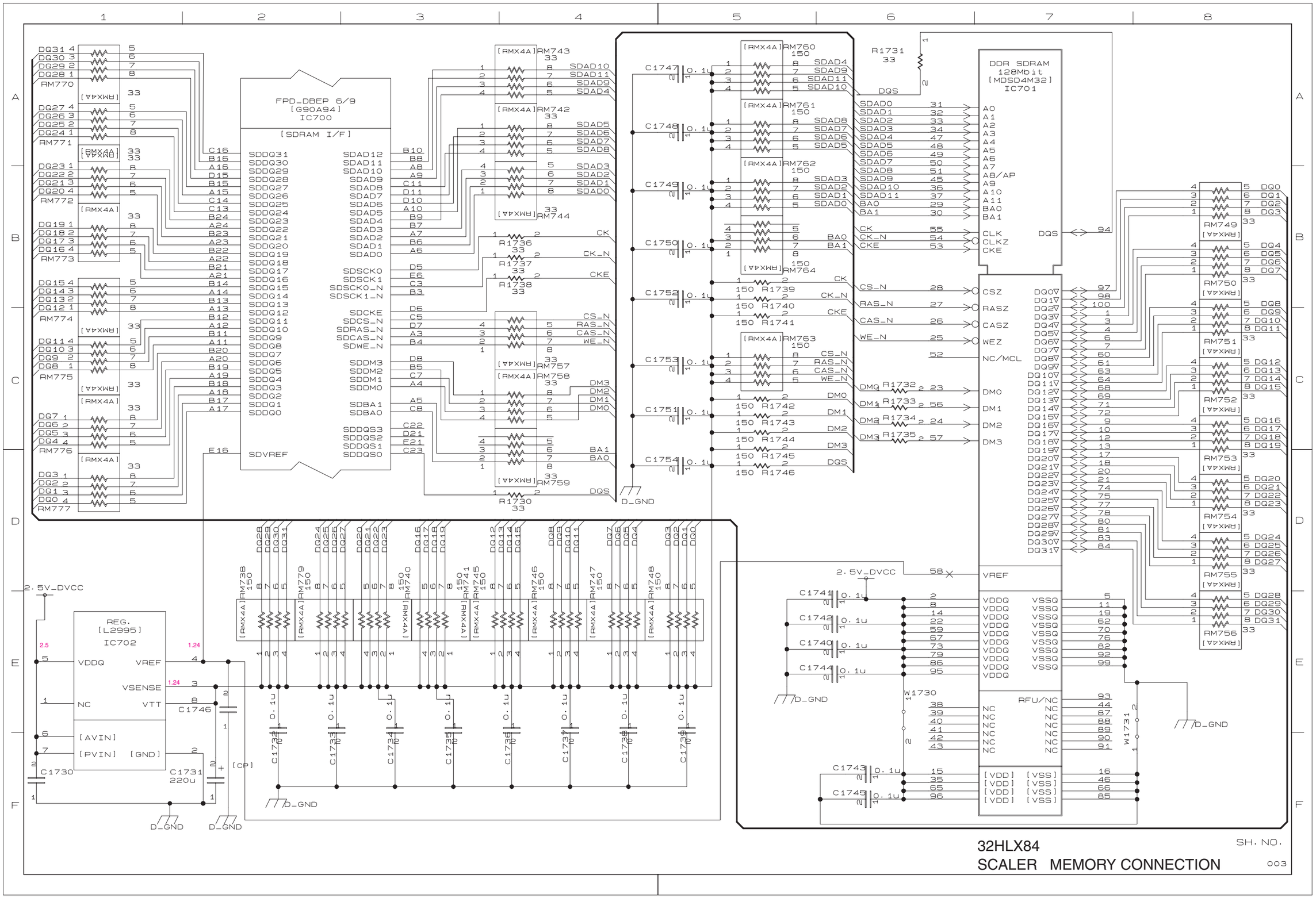
054:7A HD_CLK — 63mW33(J) R1725

[EC574] IC737 — EN, C1 — 1D [0] ▷ ▽ [1] [2] [3] [4] [5] [6] [7] [VCC] [GND] — 0.01U C1706 — D_GND

3.3VS_2

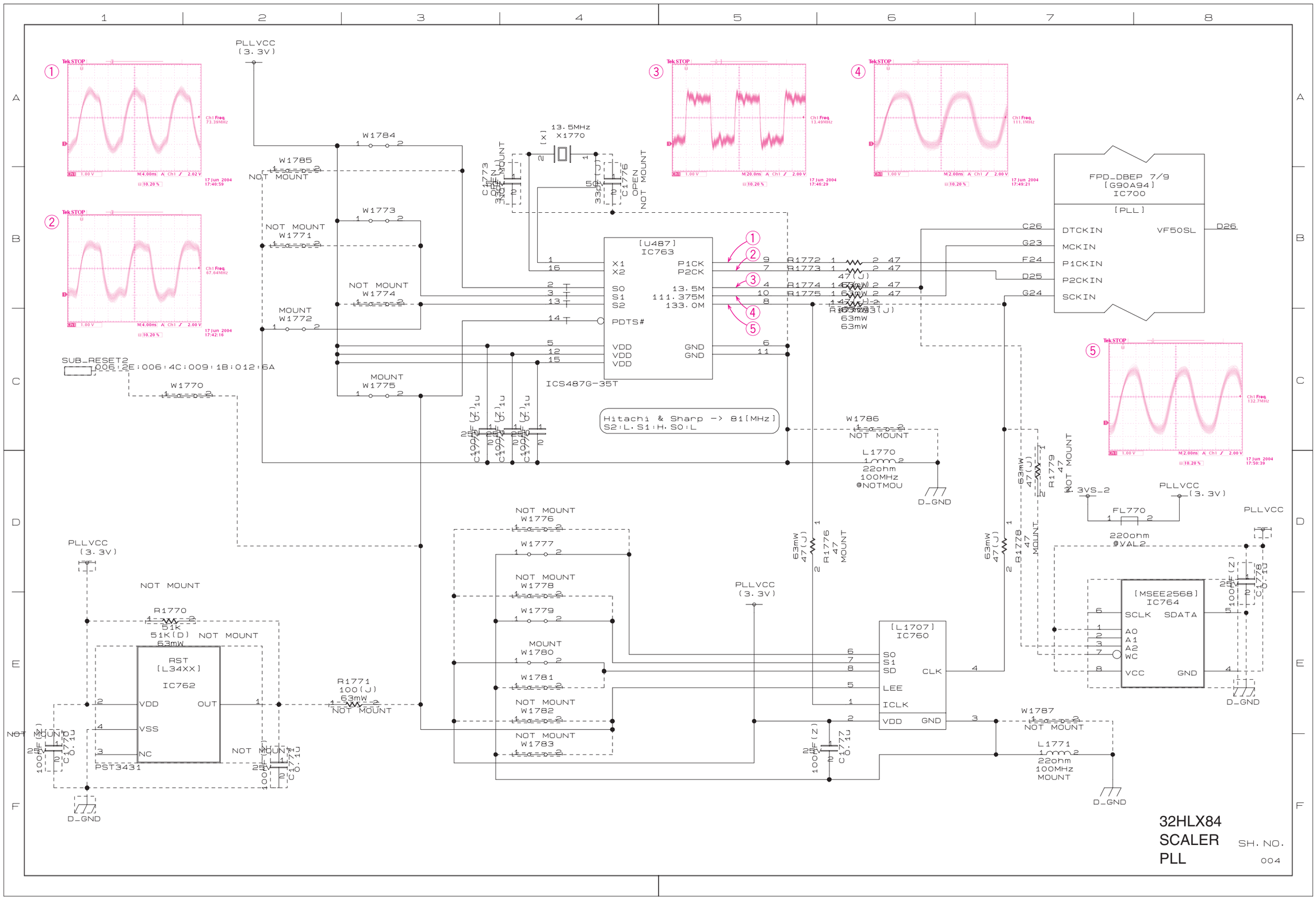
46WM48P
SCALER
CAPTURE INPUT

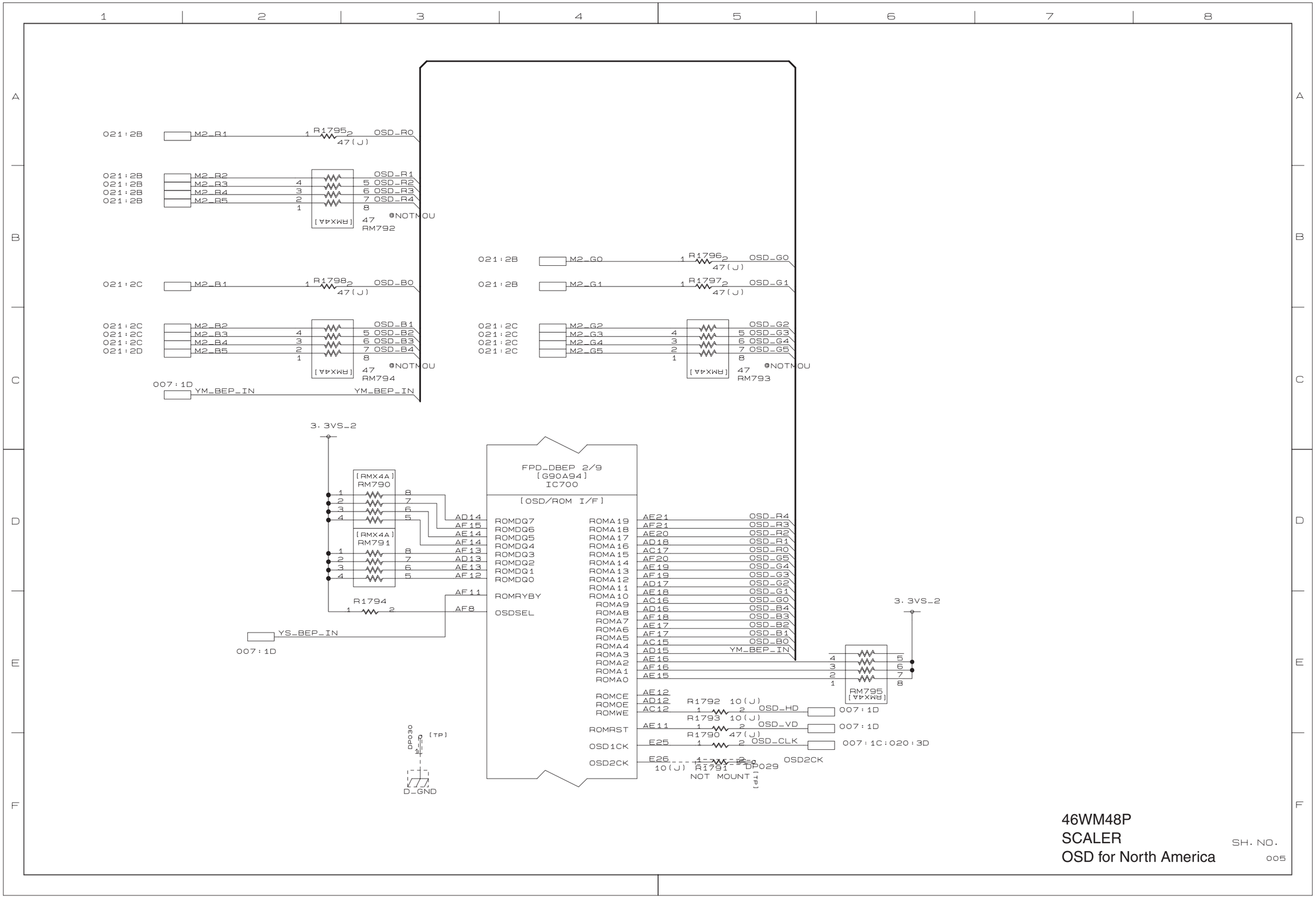
SH. NO. 002

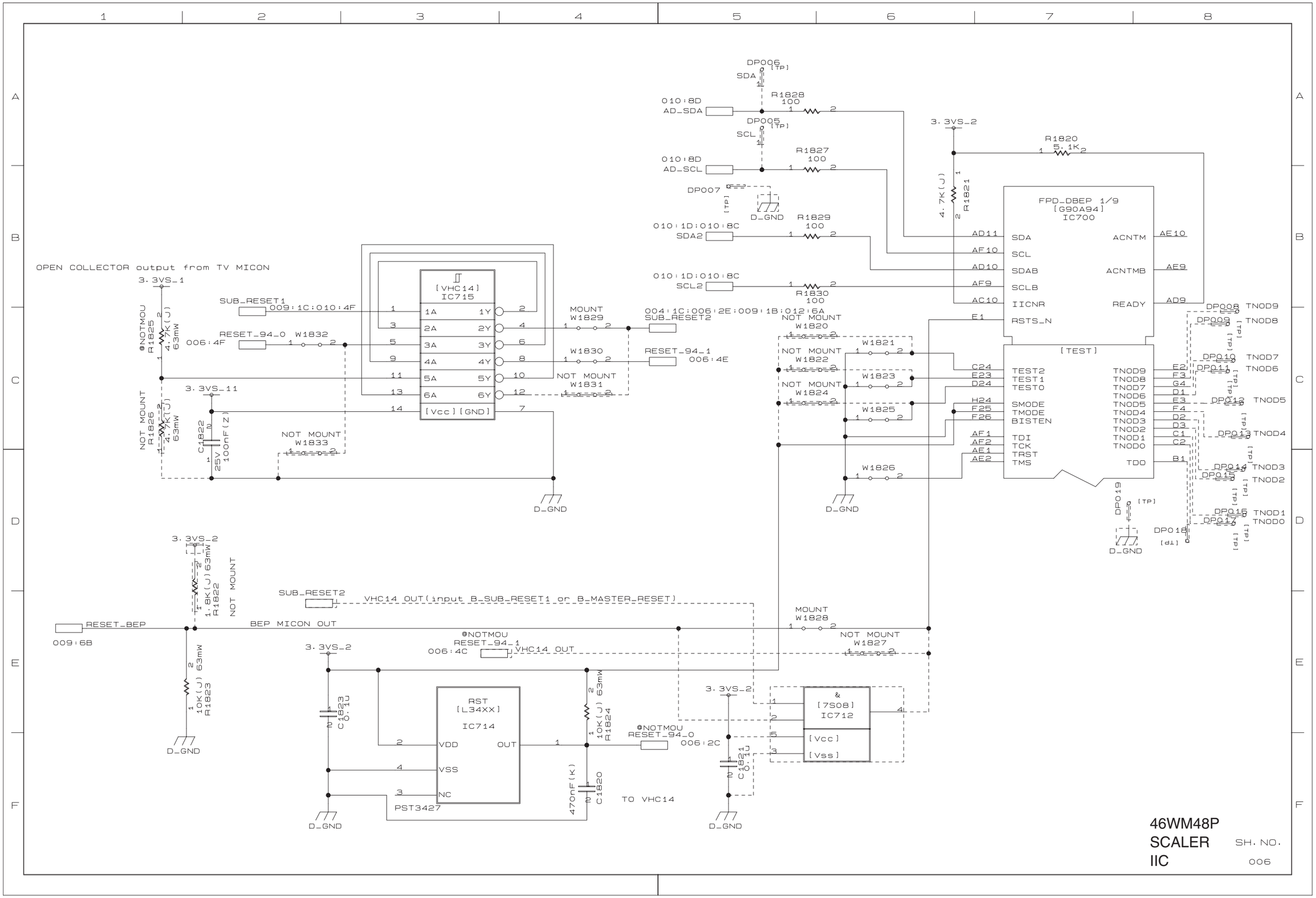


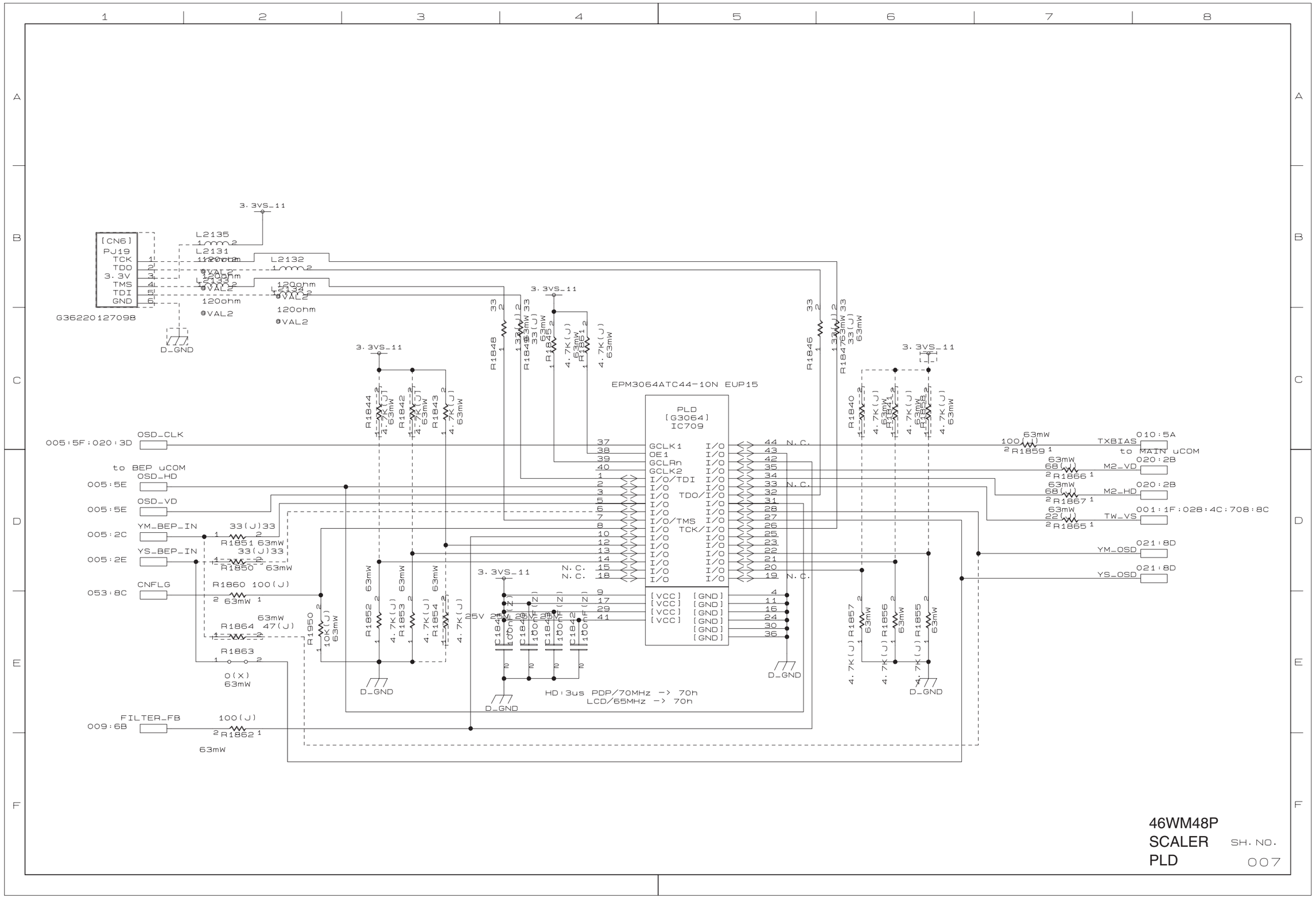
32HLX84
SCALER MEMORY CONNECTION

SH. NO.
003

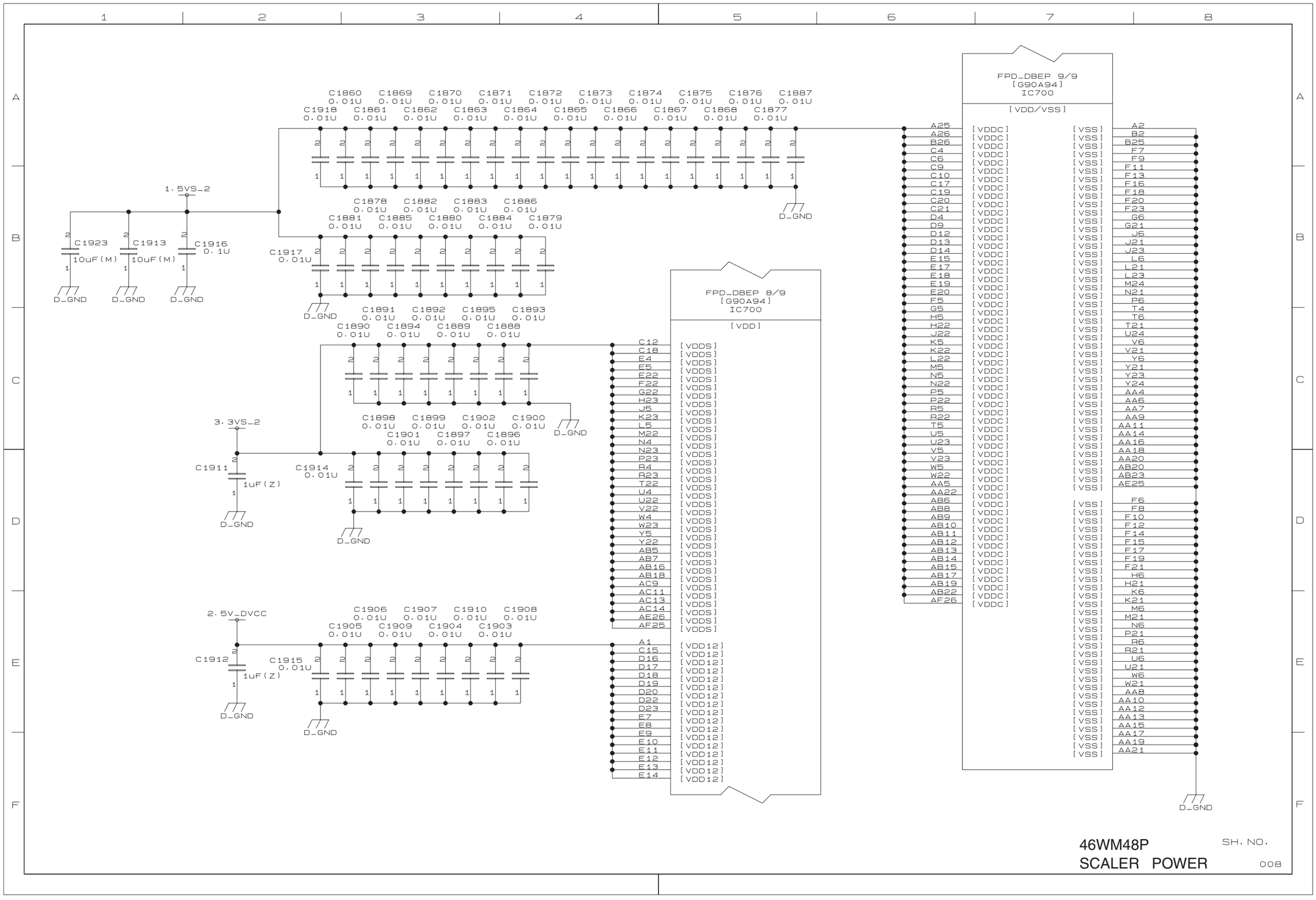

PLLVCC
(3.3V)
W1784
W1785
NOT MOUNT
W1773
NOT MOUNT
W1771
NOT MOUNT
W1774
MOUNT
W1772
MOUNT
W1775
SUB_RESET2
006:2E:006:4C:009:1B:012:6A
W1770
13.5MHz
X1770
C1773
OPEN
NOT MOUNT
C1775
OPEN
NOT MOUNT
[U487]
IC763
X1
X2
SO
S1
S2
PDTS#
VDD
VDD
VDD
P1CK
P2CK
13.5M
111.375M
133.0M
GND
GND
ICS487G-35T
Hitachi & Sharp -> 81[MHz]
S2:L.S1:H.S0:L
C1772 100PF(Z) 0.1U
C1774 100PF(Z) 0.1U
C1776 100PF(Z) 0.1U
R1772 47
R1773 47
R1774 47
R1775 47
R1793 47(J)
63mW
FPD_DBEP 7/9
[G90A94]
IC700
[PLL]
C26
G23
F24
D25
G24
DTCKIN
MCKIN
P1CKIN
P2CKIN
SCKIN
VF50SL
D26
W1786
NOT MOUNT
L1770
22ohm
100MHz
@NOTMOU
D_GND
R1779 47
NOT MOUNT
3VS_2
FL770
PLLVCC
(3.3V)
PLLVCC
220ohm
@VAL2
[MSEE2568]
IC764
SCLK
SDATA
AO
A1
A2
WC
VCC
GND
C1778 100PF(Z)
D_GND
PLLVCC
(3.3V)
NOT MOUNT
R1770
51k
51K(D) NOT MOUNT
63mW
RST
[L34XX]
IC762
VDD
VSS
NC
OUT
PST3431
C1770 100PF(Z) 0.1U
NOT MOUNT
C1771 100PF(Z) 0.1U
R1771
100(J)
63mW
NOT MOUNT
D_GND
NOT MOUNT
W1776
W1777
NOT MOUNT
W1778
W1779
MOUNT
W1780
W1781
NOT MOUNT
W1782
NOT MOUNT
W1783
PLLVCC
(3.3V)
R1776 47
MOUNT
[L1707]
IC760
SO
S1
SD
LEE
ICLK
CLK
VDD
GND
C1777 100PF(Z) 0.1U
R1778 47
MOUNT
W1787
NOT MOUNT
L1771
22ohm
100MHz
MOUNT
D_GND
32HLX84
SCALER
PLL
SH. NO.
004

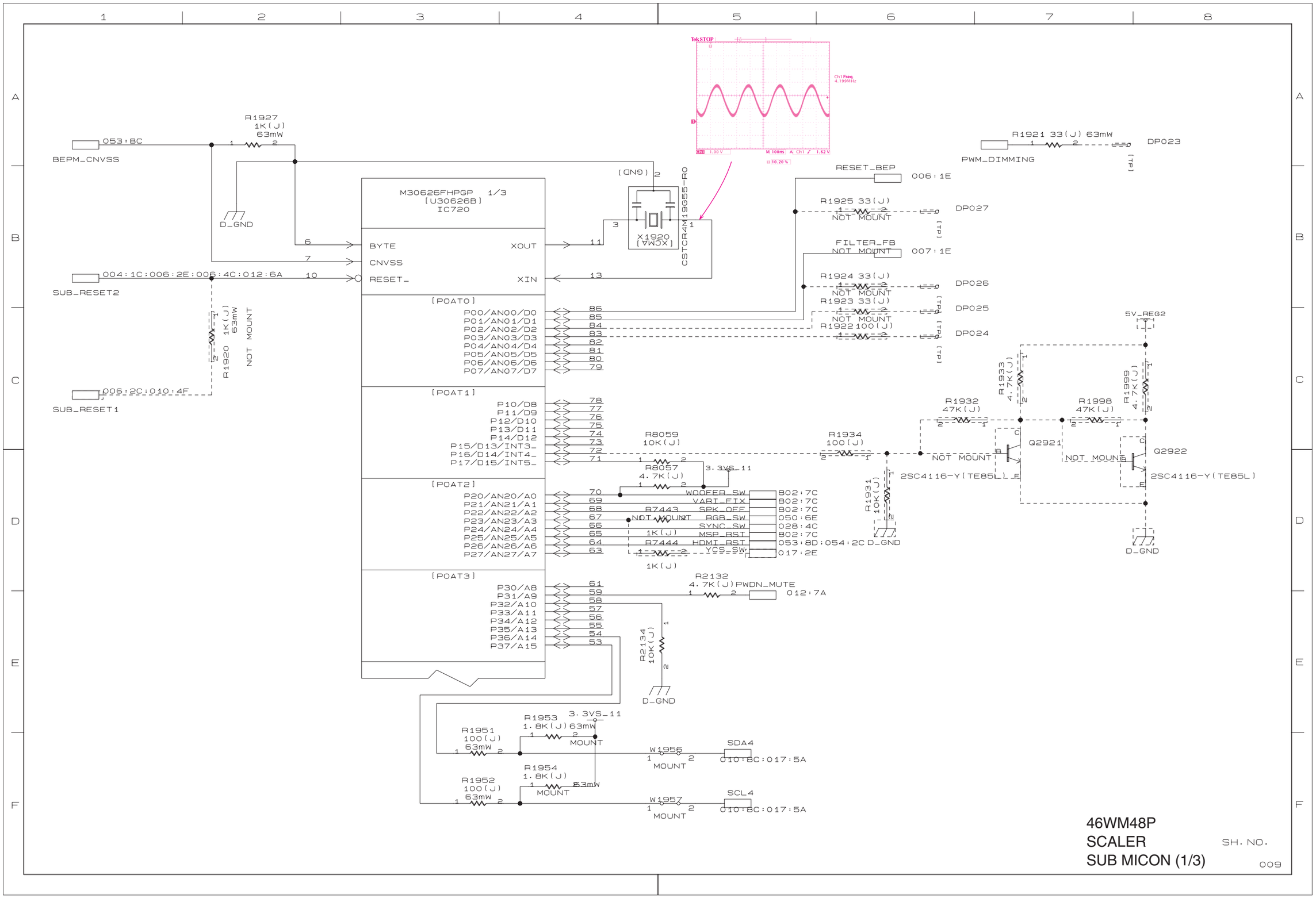

FPD_DBEP 2/9
[G90A94]
IC700
[OSD/ROM I/F]
ROMDQ7
ROMDQ6
ROMDQ5
ROMDQ4
ROMDQ3
ROMDQ2
ROMDQ1
ROMDQ0
ROMRYBY
OSDSEL
ROMCE
ROMOE
ROMWE
ROMRST
OSD1CK
OSD2CK
ROMA19
ROMA18
ROMA17
ROMA16
ROMA15
ROMA14
ROMA13
ROMA12
ROMA11
ROMA10
ROMA9
ROMA8
ROMA7
ROMA6
ROMA5
ROMA4
ROMA3
ROMA2
ROMA1
ROMA0
M2_R1
M2_R2
M2_R3
M2_R4
M2_R5
M2_G0
M2_G1
M2_G2
M2_G3
M2_G4
M2_G5
R1795 47(J)
R1796 47(J)
R1797 47(J)
R1798 47(J)
R1794
RM790
RM791
RM792
RM793
RM794
RM795
[RMX4A]
OSD_R0
OSD_R1
OSD_R2
OSD_R3
OSD_R4
OSD_G0
OSD_G1
OSD_G2
OSD_G3
OSD_G4
OSD_G5
OSD_B0
OSD_B1
OSD_B2
OSD_B3
OSD_B4
YM_BEP_IN
YS_BEP_IN
OSD_HD
OSD_VD
OSD_CLK
R1792 10(J)
R1793 10(J)
R1790 47(J)
R1791 10(J)
NOT MOUNT
3.3VS_2
D_GND
DP030
DP029
021:2B
021:2C
021:2D
007:1D
007:1C:020:3D
@NOTMOU
46WM48P
SCALER
OSD for North America
SH. NO.
005


OPEN COLLECTOR output from TV MICON
3.3VS_1
SUB_RESET1
009:1C:010:4F
RESET_94_0
006:4F
W1832
@NOTMOU
R1825
4.7K(J)
63mW
NOT MOUNT
R1826
4.7K(J)
63mW
3.3VS_11
C1822
0
25V
100nF(Z)
NOT MOUNT
W1833
[VHC14]
IC715
1A
1Y
2A
2Y
3A
3Y
4A
4Y
5A
5Y
6A
6Y
[Vcc][GND]
MOUNT
W1829
W1830
NOT MOUNT
W1831
004:1C:006:2E:009:1B:012:6A
SUB_RESET2
RESET_94_1
006:4E
D_GND
DP006
[TP]
SDA
010:8D
AD_SDA
R1828
100
DP005
[TP]
SCL
010:8D
AD_SCL
R1827
100
DP007
[TP]
D_GND
010:1D:010:8C
SDA2
R1829
100
010:1D:010:8C
SCL2
R1830
100
3.3VS_2
R1820
5.1K
4.7K(J)
R1821
FPD_DBEP 1/9
[G90A94]
IC700
AD11
SDA
ACNTM
AE10
AF10
SCL
AD10
SDAB
ACNTMB
AE9
AF9
SCLB
AC10
IICNR
READY
AD9
E1
RSTS_N
NOT MOUNT
W1820
W1821
NOT MOUNT
W1822
W1823
NOT MOUNT
W1824
W1825
W1826
[TEST]
C24
TEST2
E23
TEST1
D24
TEST0
H24
SMODE
F25
TMODE
F26
BISTEN
AF1
TDI
AF2
TCK
AE1
TRST
AE2
TMS
TNOD9
TNOD8
TNOD7
TNOD6
TNOD5
TNOD4
TNOD3
TNOD2
TNOD1
TNOD0
TDO
E2
F3
G4
D1
E3
F4
D2
D3
C1
C2
B1
DP008
DP009
DP010
DP011
DP012
DP013
DP014
DP015
DP016
DP017
DP018
[TP]
D_GND
3.3VS_2
1.8K(J)63mW
R1822
NOT MOUNT
SUB_RESET2
VHC14 OUT(input B_SUB_RESET1 or B_MASTER_RESET)
RESET_BEP
009:6B
BEP MICON OUT
MOUNT
W1828
NOT MOUNT
W1827
@NOTMOU
RESET_94_1
006:4C
VHC14 OUT
10K(J) 63mW
R1823
C1823
0.1U
RST
[L34XX]
IC714
VDD
OUT
VSS
NC
PST3427
10K(J) 63mW
R1824
@NOTMOU
RESET_94_0
006:2C
470nF(K)
C1820
TO VHC14
3.3VS_2
&
[7S08]
IC712
[Vcc]
[Vss]
C1821
0.1U
D_GND
46WM48P
SCALER
IIC
SH. NO.
006



46WM48P
SCALER SH. NO.
PLD 007


1.5VS_2
C1923 10uF(M)
C1913 10uF(M)
C1916 0.1U
C1860 C1869 C1870 C1871 C1872 C1873 C1874 C1875 C1876 C1887 0.01U
C1918 C1861 C1862 C1863 C1864 C1865 C1866 C1867 C1868 C1877 0.01U
C1878 C1882 C1883 C1886 0.01U
C1881 C1885 C1880 C1884 C1879 0.01U
C1917 0.01U
C1891 C1892 C1895 C1893 0.01U
C1890 C1894 C1889 C1888 0.01U
C1898 C1899 C1902 C1900 0.01U
C1901 C1897 C1896 0.01U
3.3VS_2
C1911 1uF(Z)
C1914 0.01U
C1906 C1907 C1910 C1908 0.01U
C1905 C1909 C1904 C1903 0.01U
2.5V_DVCC
C1912 1uF(Z)
C1915 0.01U
D_GND
FPD_DBEP 8/9
[G90A94]
IC700
[VDD]
C12 C18 E4 E5 E22 F22 G22 H23 J5 K23 L5 M22 N4 N23 P23 R4 R23 T22 U4 U22 V22 W4 W23 Y5 Y22 AB5 AB7 AB16 AB18 AC9 AC11 AC13 AC14 AE26 AF25 [VDDS]
A1 C15 D16 D17 D18 D19 D20 D22 D23 E7 E8 E9 E10 E11 E12 E13 E14 [VDD12]
FPD_DBEP 9/9
[G90A94]
IC700
[VDD/VSS]
A25 A26 B26 C4 C6 C9 C10 C17 C19 C20 C21 D4 D9 D12 D13 D14 E15 E17 E18 E19 E20 F5 G5 H5 H22 J22 K5 K22 L22 M5 N5 N22 P5 P22 R5 R22 T5 U5 U23 V5 V23 W5 W22 AA5 AA22 AB6 AB8 AB9 AB10 AB11 AB12 AB13 AB14 AB15 AB17 AB19 AB22 AF26 [VDDC]
A2 B2 B25 F7 F9 F11 F13 F15 F18 F20 F23 G6 G21 J6 J21 J23 L6 L21 L23 M24 N21 P6 T4 T6 T21 U24 V6 V21 Y6 Y21 Y23 Y24 AA4 AA6 AA7 AA9 AA11 AA14 AA16 AA18 AA20 AB20 AB23 AE25 [VSS]
F6 F8 F10 F12 F14 F15 F17 F19 F21 H6 H21 K6 K21 M6 M21 N6 P21 R6 R21 U6 U21 W6 W21 AA8 AA10 AA12 AA13 AA15 AA17 AA19 AA21 [VSS]
46WM48P
SCALER POWER
SH. NO.
008


M30626FHPGP 1/3
[U30626B]
IC720
BYTE
CNVSS
RESET_
XOUT
XIN
[POAT0]
P00/AN00/D0
P01/AN01/D1
P02/AN02/D2
P03/AN03/D3
P04/AN04/D4
P05/AN05/D5
P06/AN06/D6
P07/AN07/D7
[POAT1]
P10/D8
P11/D9
P12/D10
P13/D11
P14/D12
P15/D13/INT3_
P16/D14/INT4_
P17/D15/INT5_
[POAT2]
P20/AN20/A0
P21/AN21/A1
P22/AN22/A2
P23/AN23/A3
P24/AN24/A4
P25/AN25/A5
P26/AN26/A6
P27/AN27/A7
[POAT3]
P30/A8
P31/A9
P32/A10
P33/A11
P34/A12
P35/A13
P36/A14
P37/A15
X1920
[XCMA]
CSTCR4M19G55-R0
(GND)
D_GND
R1927 1K(J) 63mW
053:8C
BEPM_CNVSS
004:1C:006:2E:008:4C:012:6A
SUB_RESET2
R1920 1K(J) 63mW NOT MOUNT
006:2C:010:4F
SUB_RESET1
R1921 33(J) 63mW
PWM_DIMMING
DP023
RESET_BEP
006:1E
R1925 33(J)
NOT MOUNT
DP027
FILTER_FB
NOT MOUNT
007:1E
R1924 33(J)
NOT MOUNT
DP026
R1923 33(J)
NOT MOUNT
DP025
R1922 100(J)
DP024
5V_REG2
R1933 4.7K(J)
R1999 4.7K(J)
R1932 47K(J)
R1998 47K(J)
Q2921
Q2922
NOT MOUNT
2SC4116-Y(TE85L)
R1934 100(J)
R1931 10K(J)
R8059 10K(J)
R8057 4.7K(J)
3.3VS_11
R7443 NOT MOUNT
R7444 1K(J)
1K(J)
WOOFER_SW
VART_FIX
SPK_OFF
RGB_SW
SYNC_SW
MSP_RST
HDMI_RST
YCS_SW
802:7C
802:7C
802:7C
050:6E
028:4C
802:7C
053:8D:054:2C
017:2E
R2132 4.7K(J) PWDN_MUTE
012:7A
R2134 10K(J)
R1953 1.8K(J) 63mW MOUNT
R1951 100(J) 63mW
W1956 MOUNT
SDA4
010:8C:017:5A
R1954 1.8K(J) 63mW MOUNT
R1952 100(J) 63mW
W1957 MOUNT
SCL4
010:8C:017:5A
TekSTOP
Ch1 Freq 4.199MHz
Ch1 1.00 V
M 100ns A Ch1 1.82 V
10.20 %
46WM48P
SCALER
SUB MICON (1/3)
SH. NO.
009

053:8C BEPM_CE
053:8C BEPM_EPM
053:8C BEPM_BUSY
053:8C BEPM_SCLK
053:8C BEPM_RXD1
053:8C BEPM_TXD1
053:8C BEPM_RST

M30626FHPGP 2/3
[U30626B]
IC720

[PORT4]
P40/A16 52
P41/A17 51
P42/A18 50
P43/A19 49
P44/CS0_ 48
P45/CS1_ 47
P46/CS2_ 46
P47/CS3_ 45

[PORT5]
P50/WRL_/WR_ 44
P51/WRH_/BHE_ 43
P52/RD_ 42
P53/BCLK 41
P54/HLDA_ 40
P55/HOLD_ 39
P56/ALE 38
P57/RDY_/CLKOUT 37

[PORT6]
P60/CTS0_/RTS0_ 36
P61/CLK0 35
P62/RXD0/SCL0 34
P63/TXD0/SDA0 33
P64/CTS1_/RTS1_/CTS0_/CLKS1 32
P65/CLK1 31
P66/RXD1/SCL1 30
P67/TXD1/SDA1 29

[PORT7]
P70/TXD2/SDA2/TA0OUT 28
P71/RXD2/SCL2/TA0IN/TB5IN 27
P72/CLK2/TA1OUT/V 26
P73/CTS2_/RTS2_/TA1IN/V_ 25
P74/TA2OUT/W 24
P75/TA2IN/W_ 23
P76/TA3OUT 22
P77/TA3IN 21

RESETZ 055:5C
BEP_TXD3(LMPPWR) 055:5E
LAMPEN 055:8D
LAMPLITZ 055:5D
R8058 100(J)
STOP_FAN 802:7B
R1942 100(J)
ASICREADY 055:8C

RM942 100(J) 31mW [RMX4A]
RM941 100(J) 31mW [RMX4A]

TXBIAS 007:8C

BUS SWITCH [CL1G125] IC776
BUS SWITCH [CL1G125] IC777
OE A Y [VCC] [GND]

C1931 1uF(Z) 10V
C1930 1uF(Z) 10V

SCL33 020:2C:027:5B:701:2B
SDA33 020:2C:027:5A:701:2B

R1945 100(J)
R1946 100(J)
R1947 1.8K(J) 63mW MOUNT
R1948 1.8K(J) 63mW MOUNT
R1943 1.8K(J) 63mW
3.3VS_11

W1954 MOUNT SDA3 010:1E:018:3A:055:5B
W1955 MOUNT SCL3 010:1E:018:3A:055:8B
D_GND

RM945 1.8K(J) 31mW [RMX4A]
RM940 22K(J) 31mW [RMX4A]
RM944 1.8K(J) 31mW [RMX4A]

W1943 009:5F:017:5A SCL4
W1942 009:5F:017:5A SDA4
W1941 006:5B:010:1D SCL2
W1940 006:5B:010:1D SDA2

NOT MOUNT W1944
NOT MOUNT W1945

W1949 MOUNT AD_SCL 006:5B
W1948 MOUNT AD_SDA 006:5A

FILTER_PWM 017:8E
PWM_DIMMING 009:7A

006:5B:010:8C SCL2
006:5B:010:8C SDA2
NOT MOUNT W1953
NOT MOUNT W1952

010:8B:018:3A:055:8B SCL3
010:8B:018:3A:055:5B SDA3
NOT MOUNT W1950
W1951 NOT MOUNT

053:8C BEPM_SCL_AB
053:8D BEPM_SDA_AB

W1946 MOUNT
W1947 MOUNT

3.3VS_11 W2125

RST [L34XX] IC716
VDD OUT VSS NC
PST3427

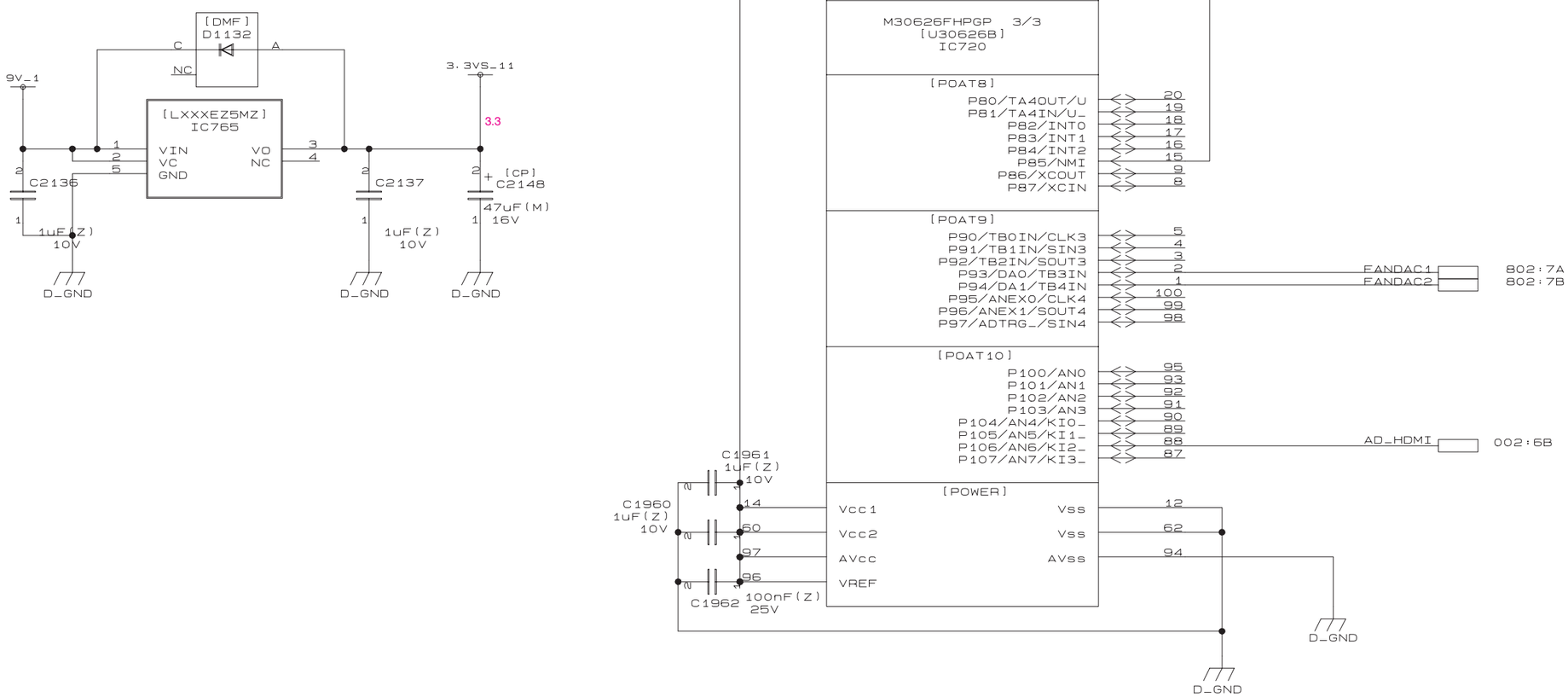
C1941 10V 1uF(Z)
10K(J) 63mW R1949
2.1K(J) 63mW R1944
470PF(K) C1942
SUB_RESET1

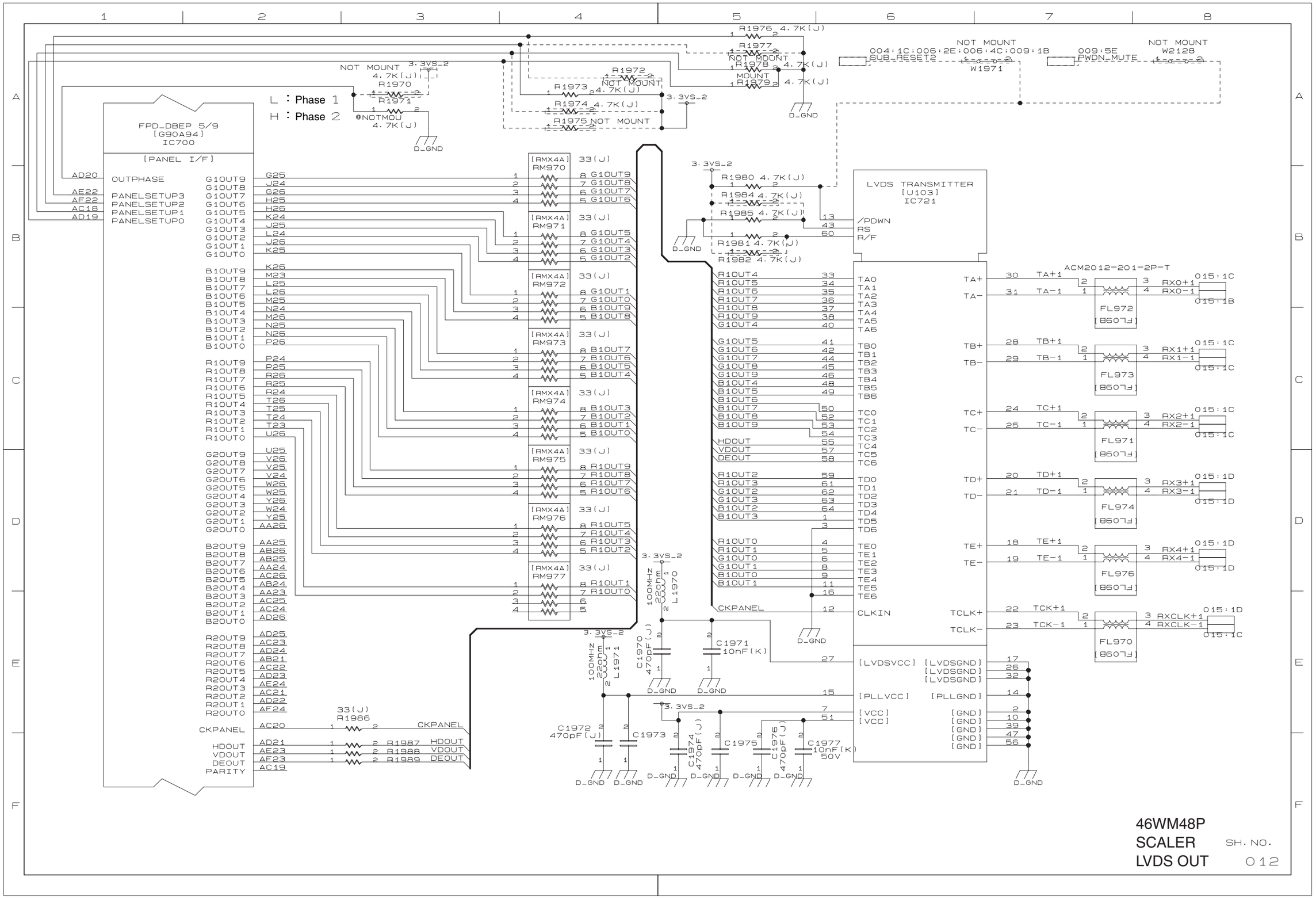
EEPROM [MSEE32K8] IC717
SDA SCL A0 A1 NC WP [Vcc] [Vss]
AT24C256N-10SU-2.7

R1941 100(J) 63mW
R1940 100(J) 63mW
C1940 1uF(Z) 10V
D_GND

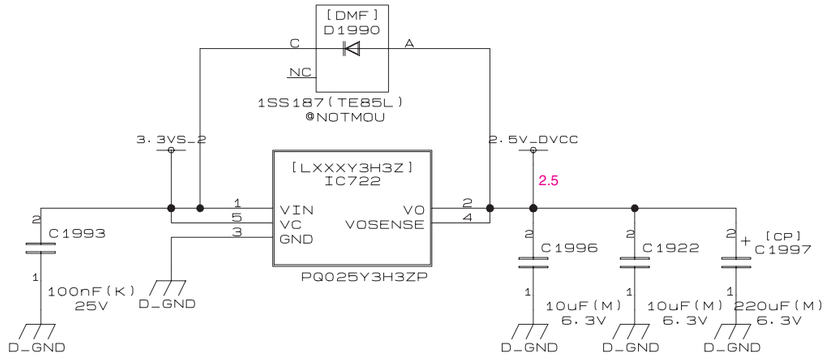
46WM48P
SCALER SUB MICON (2/3)
SH. NO. 010

(26/57)


[DMF]
D1132
C
A
NC
9V_1
[LXXXEZ5MZ]
IC765
VIN
VC
GND
VO
NC
3.3VS_11
3.3
C2136
1uF(Z)
10V
C2137
1uF(Z)
10V
[CP]
C2148
47uF(M)
16V
D_GND
M30626FHPGP 3/3
[U30626B]
IC720
[POAT8]
P80/TA4OUT/U
P81/TA4IN/U_
P82/INT0
P83/INT1
P84/INT2
P85/NMI
P86/XCOUT
P87/XCIN
[POAT9]
P90/TB0IN/CLK3
P91/TB1IN/SIN3
P92/TB2IN/SOUT3
P93/DA0/TB3IN
P94/DA1/TB4IN
P95/ANEX0/CLK4
P96/ANEX1/SOUT4
P97/ADTRG_/SIN4
FANDAC1
FANDAC2
802:7A
802:7B
[POAT10]
P100/AN0
P101/AN1
P102/AN2
P103/AN3
P104/AN4/KI0_
P105/AN5/KI1_
P106/AN6/KI2_
P107/AN7/KI3_
AD_HDMI
002:6B
[POWER]
Vcc1
Vcc2
AVcc
VREF
Vss
Vss
AVss
C1961
1uF(Z)
10V
C1960
1uF(Z)
10V
C1962
100nF(Z)
25V
46WM48P
SCALER
SUB MICON (3/3)
SH. NO.
011

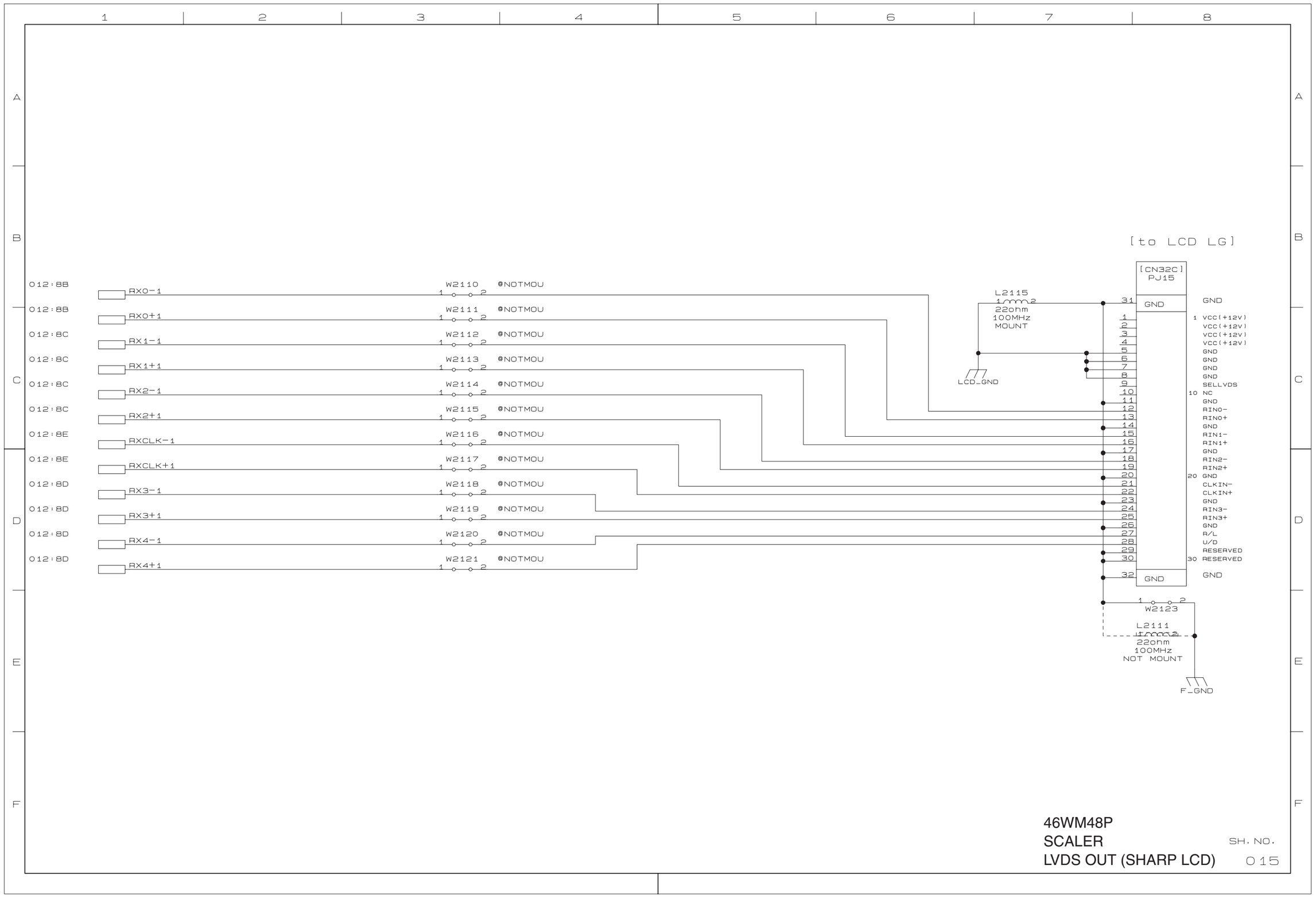


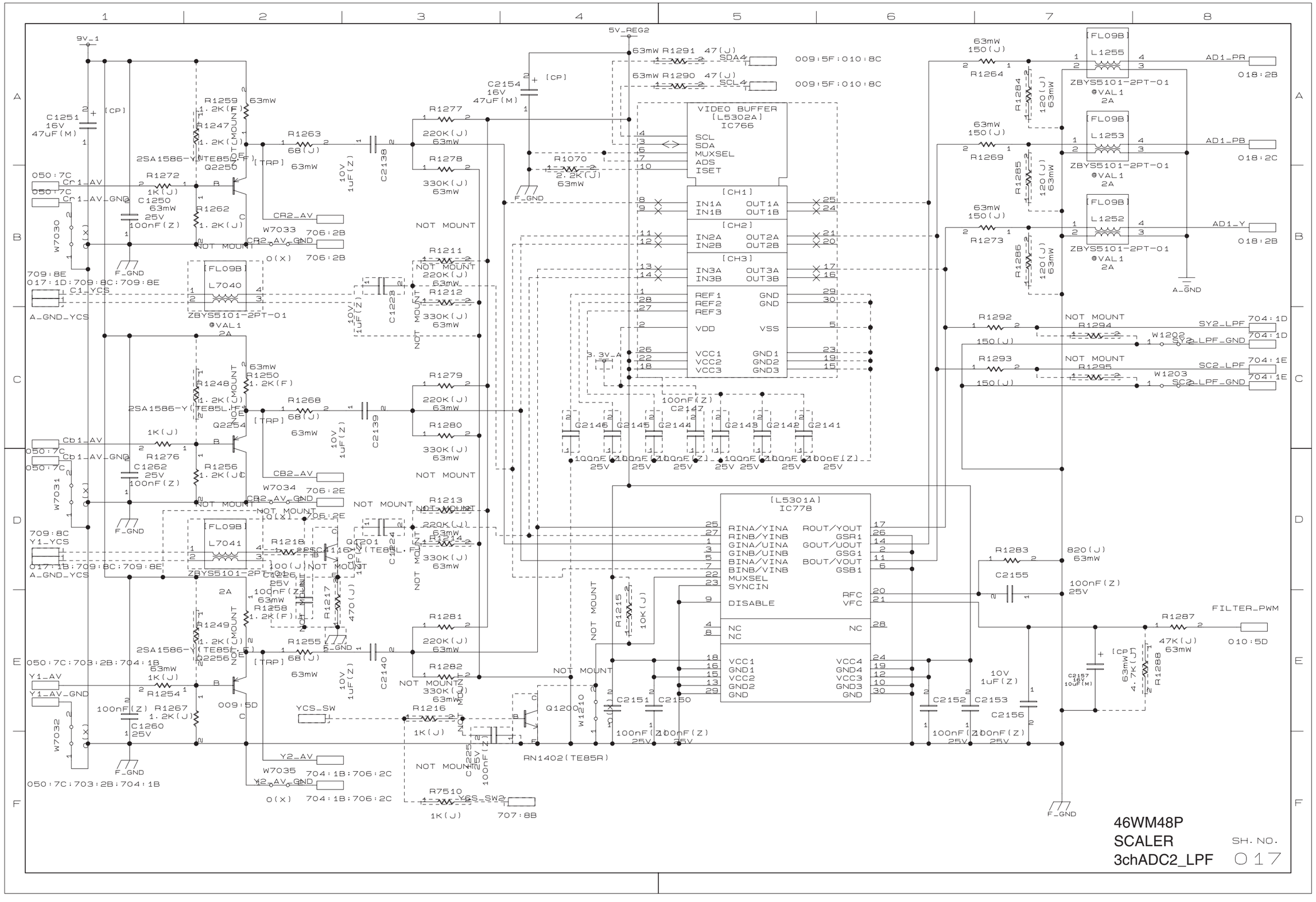
46WM48P
SCALER SH. NO.
LVDS OUT 012

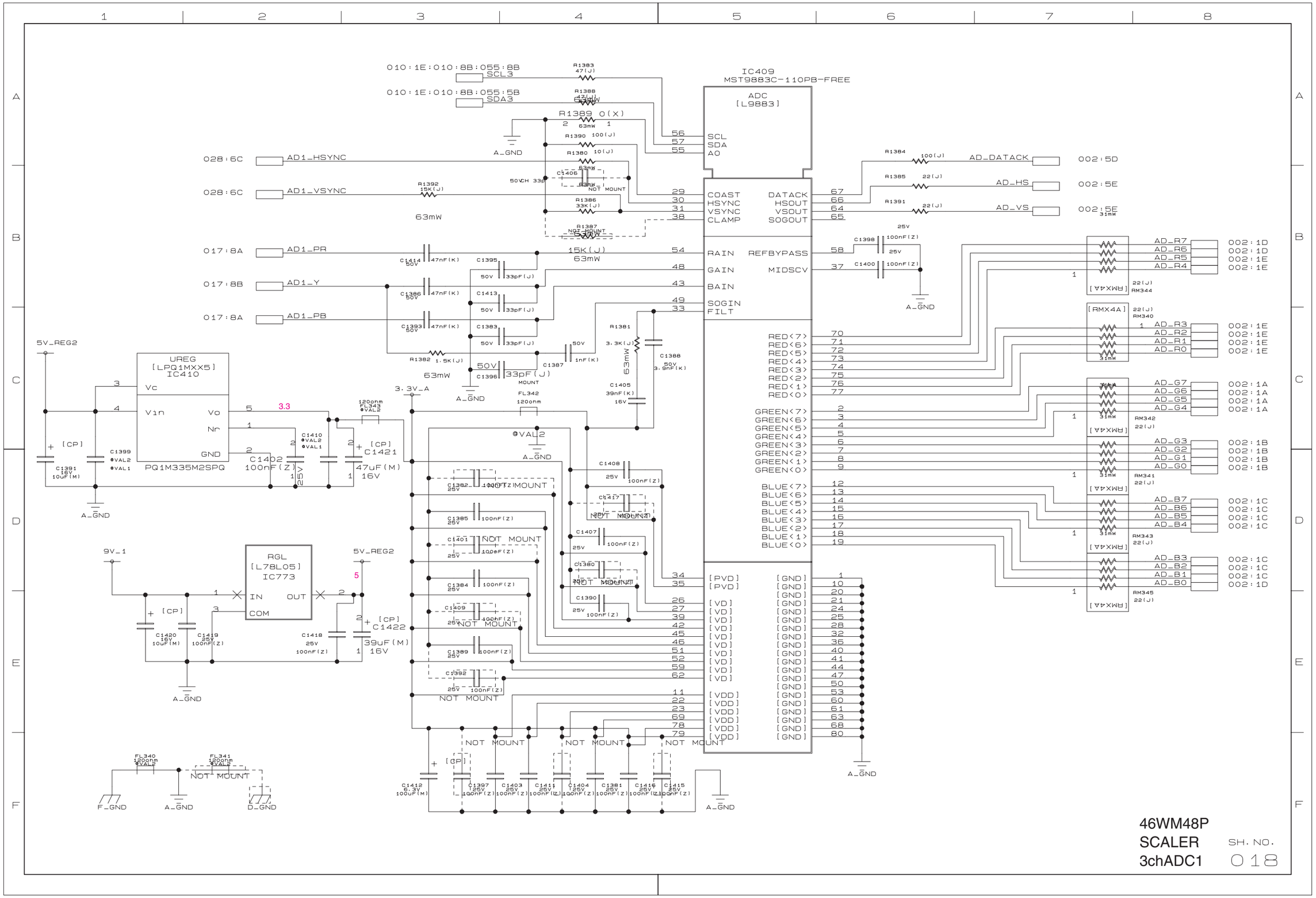


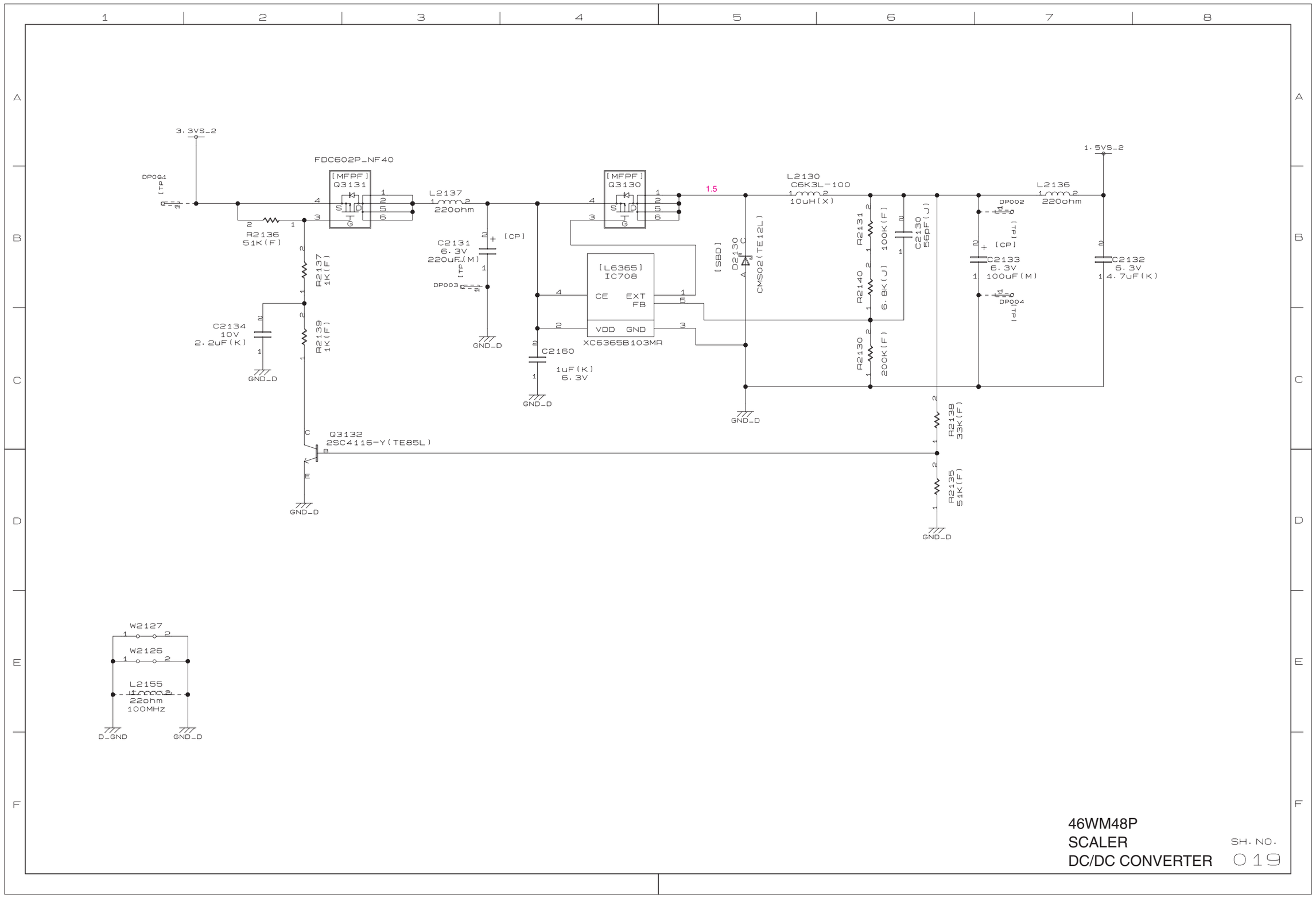
46WM48P
SCALER
Power Connector and Dimming

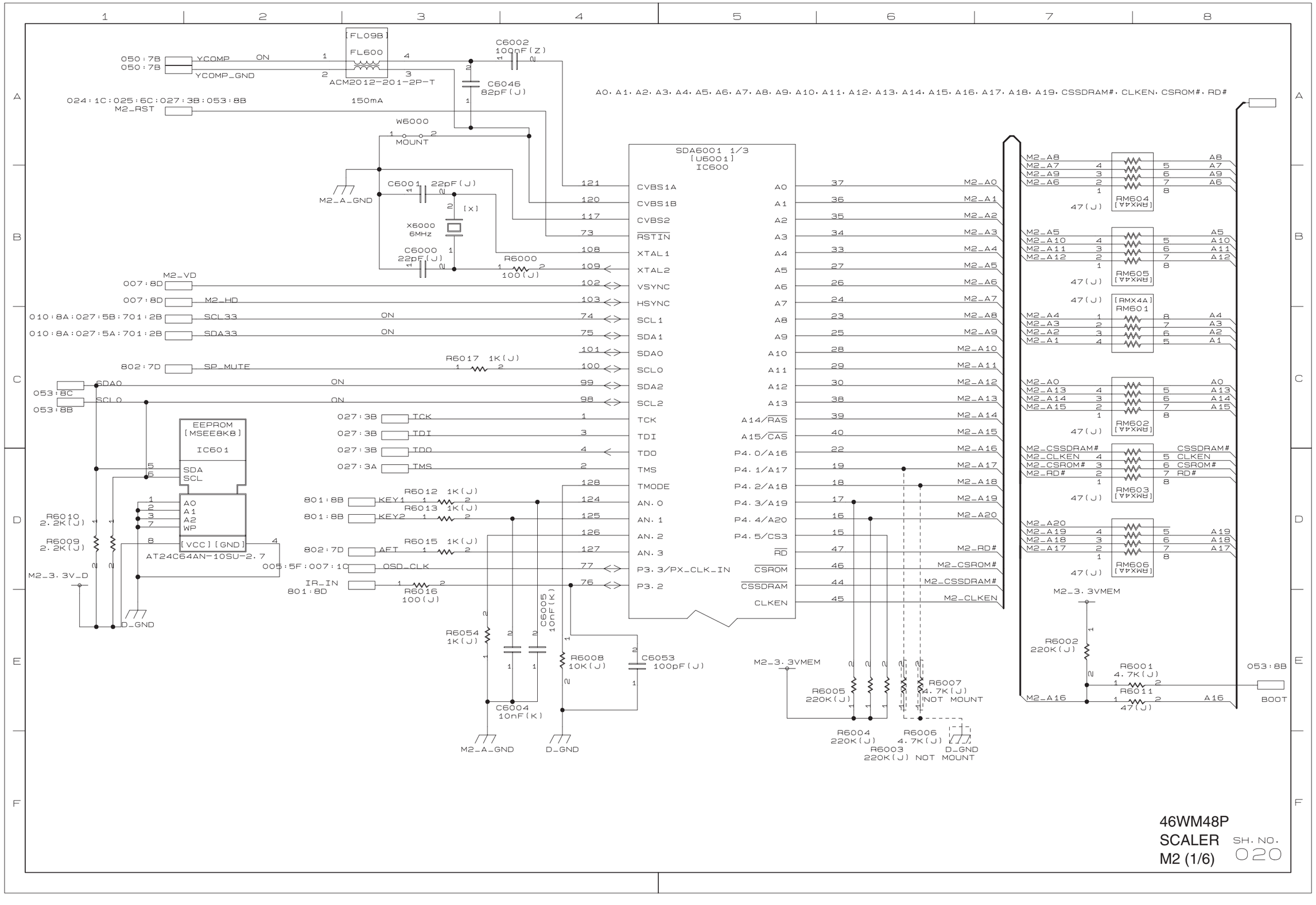
SH. NO.
013


[to LCD LG]
[CN32C]
PJ15
RX0-1
RX0+1
RX1-1
RX1+1
RX2-1
RX2+1
RXCLK-1
RXCLK+1
RX3-1
RX3+1
RX4-1
RX4+1
012:8B
012:8B
012:8C
012:8C
012:8C
012:8C
012:8E
012:8E
012:8D
012:8D
012:8D
012:8D
W2110
W2111
W2112
W2113
W2114
W2115
W2116
W2117
W2118
W2119
W2120
W2121
@NOTMOU
L2115
22ohm
100MHz
MOUNT
LCD_GND
GND
VCC(+12V)
VCC(+12V)
VCC(+12V)
VCC(+12V)
GND
GND
GND
GND
SELLVDS
NC
GND
RIN0-
RIN0+
GND
RIN1-
RIN1+
GND
RIN2-
RIN2+
GND
CLKIN-
CLKIN+
GND
RIN3-
RIN3+
GND
R/L
U/D
RESERVED
RESERVED
GND
W2123
L2111
22ohm
100MHz
NOT MOUNT
F_GND
46WM48P
SCALER
LVDS OUT (SHARP LCD)
SH. NO.
015

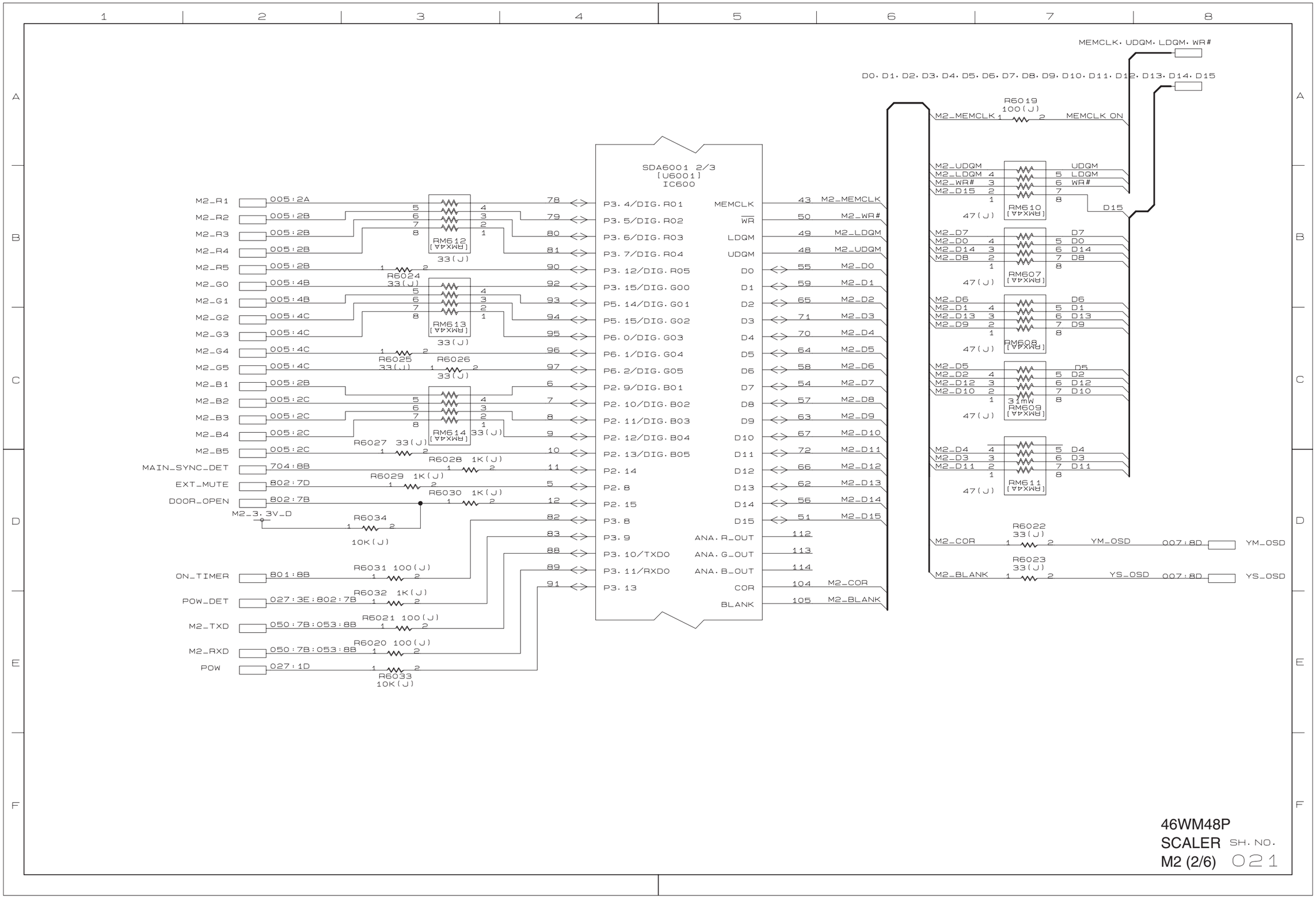

9V_1
5V_REG2
C1251 16V 47uF(M) [CP]
C2154 16V 47uF(M) [CP]
R1259 1.2K(F) 63mW
R1247 1.2K(J) NOT MOUNT
2SA1586-Y(TE85L,F) Q2250
R1263 68(J) 63mW [TRP]
R1272 1K(J) 63mW
C1250 25V 100nF(Z)
R1262 1.2K(J)
050:7C Cr1_AV
050:7C Cr1_AV_GND
W7030 (X)
F_GND
CR2_AV
W7033 706:2B
CR2_AV_GND 706:2B
709:8E 017:1D:709:8C:709:8E C1_YCS
A_GND_YCS
[FL09B] L7040 ZBYS5101-2PT-01 @VAL1 2A
C2138 10V 1uF(Z)
R1277 220K(J) 63mW
R1278 330K(J) 63mW NOT MOUNT
R1211 220K(J) 63mW NOT MOUNT
R1212 330K(J) 63mW NOT MOUNT
C2223 10V 1uF(Z)
R1279 220K(J) 63mW
R1280 330K(J) 63mW NOT MOUNT
R1213 220K(J) 63mW NOT MOUNT
R1214 330K(J) 63mW NOT MOUNT
C2224 10V 1uF(Z)
R1281 220K(J) 63mW
R1282 330K(J) 63mW NOT MOUNT
C2140 10V 1uF(Z)
R1070 2.2K(J) 63mW
F_GND
63mW R1291 47(J) SDA4 009:5F:010:8C
63mW R1290 47(J) SCL4 009:5F:010:8C
VIDEO BUFFER [L5302A] IC766
SCL
SDA
MUXSEL
ADS
ISET
[CH1] IN1A IN1B OUT1A OUT1B
[CH2] IN2A IN2B OUT2A OUT2B
[CH3] IN3A IN3B OUT3A OUT3B
REF1 REF2 REF3 GND GND
VDD VSS
VCC1 VCC2 VCC3 GND1 GND2 GND3
3.3V_A
100nF(Z) C2147
C2146 C2145 C2144 C2143 C2142 C2141 100nF(Z) 25V
63mW 150(J) R1264 R1284 120(J) 63mW [FL09B] L1255 ZBYS5101-2PT-01 @VAL1 2A AD1_PR 018:2B
63mW 150(J) R1269 R1285 120(J) 63mW [FL09B] L1253 ZBYS5101-2PT-01 @VAL1 2A AD1_PB 018:2C
63mW 150(J) R1273 R1286 120(J) 63mW [FL09B] L1252 ZBYS5101-2PT-01 @VAL1 2A AD1_Y 018:2B
A_GND
R1292 150(J) NOT MOUNT R1294 W1202 SY2_LPF 704:1D SY2_LPF_GND 704:1D
R1293 150(J) NOT MOUNT R1295 W1203 SC2_LPF 704:1E SC2_LPF_GND 704:1E
Cb1_AV
Cb1_AV_GND
R1276 1K(J)
C1262 25V 100nF(Z)
R1256 1.2K(J)
W7031 (X)
CB2_AV
W7034 706:2E
CB2_AV_GND
709:8C Y1_YCS
017:1B:709:8C:709:8E A_GND_YCS
[FL09B] L7041 ZBYS5101-2PT-01 @VAL1 2A
R1218 100(J) NOT MOUNT
Q1201 2SC4116-Y(TE85L,F)
C2225 25V 100nF(Z) NOT MOUNT
R1217 470(J) 1/4W
R1258 1.2K(F) NOT MOUNT
R1249 1.2K(J) NOT MOUNT
2SA1586-Y(TE85L,F) Q2256
R1255 68(J) [TRP] 63mW
050:7C:703:2B:704:1B
Y1_AV
Y1_AV_GND
R1254 1K(J) 63mW
C1260 25V 100nF(Z)
R1267 1.2K(J)
009:5D
W7032 (X)
YCS_SW
R1216 1K(J) NOT MOUNT
Q1200 2SC4116-Y(TE85L,F)
W1210 0(X)
C2225 25V 100nF(Z) NOT MOUNT
RN1402(TE85R)
Y2_AV
W7035 704:1B:706:2C
Y2_AV_GND
0(X) 704:1B:706:2C
R7510 1K(J) YCS_SW2 707:8B
[L5301A] IC778
RINA/YINA RINB/YINB GINA/UINA GINB/UINB BINA/VINA BINB/VINB MUXSEL SYNCIN DISABLE
ROUT/YOUT GSR1 GOUT/UOUT GSG1 BOUT/VOUT GSB1 RFC VFC
NC NC
VCC1 GND1 VCC2 GND2 VCC3 GND3 VCC4 GND4 VCC3 GND3 GND
R1215 10K(J) NOT MOUNT
C2151 C2150 100nF(Z) 25V
C2152 C2153 C2156 100nF(Z) 25V
R1283 820(J) 63mW
C2155 100nF(Z) 25V
10V 1uF(Z)
C2157 16V 10uF(M)
R1287 47K(J) 63mW FILTER_PWM 010:5D
R1288 4.7K(J) 63mW
F_GND
46WM48P
SCALER
3chADC2_LPF
SH. NO.
017

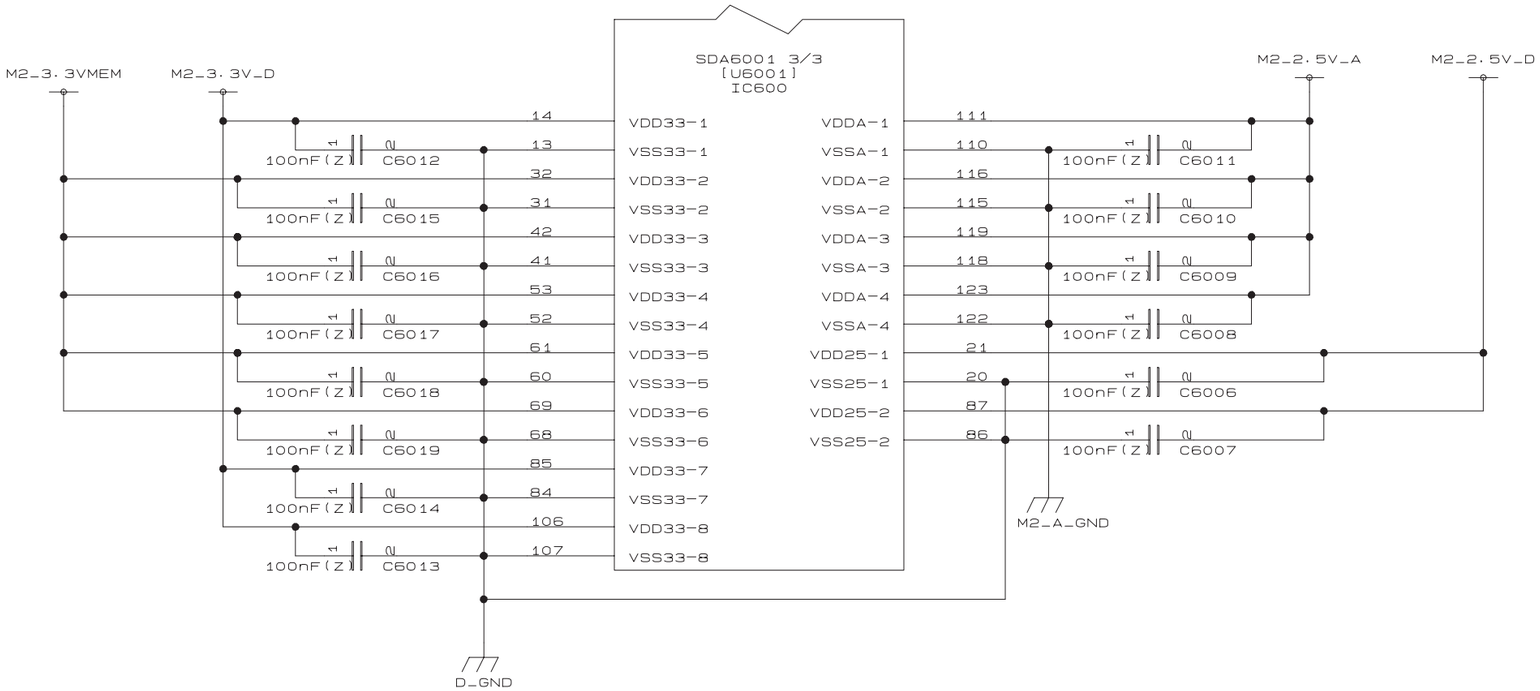

IC409
MST9883C-110PB-FREE
ADC
[L9883]
SCL
SDA
AO
COAST
HSYNC
VSYNC
CLAMP
DATACK
HSOUT
VSOUT
SOGOUT
RAIN
GAIN
BAIN
SOGIN
FILT
REFBYPASS
MIDSCV
RED<7>
RED<6>
RED<5>
RED<4>
RED<3>
RED<2>
RED<1>
RED<0>
GREEN<7>
GREEN<6>
GREEN<5>
GREEN<4>
GREEN<3>
GREEN<2>
GREEN<1>
GREEN<0>
BLUE<7>
BLUE<6>
BLUE<5>
BLUE<4>
BLUE<3>
BLUE<2>
BLUE<1>
BLUE<0>
[PVD]
[VD]
[VDD]
[GND]
010:1E:010:8B:055:8B
SCL3
010:1E:010:8B:055:5B
SDA3
028:6C
AD1_HSYNC
028:6C
AD1_VSYNC
017:8A
AD1_PR
017:8B
AD1_Y
017:8A
AD1_PB
AD_DATACK
AD_HS
AD_VS
002:5D
002:5E
002:5E
AD_R7
AD_R6
AD_R5
AD_R4
AD_R3
AD_R2
AD_R1
AD_R0
AD_G7
AD_G6
AD_G5
AD_G4
AD_G3
AD_G2
AD_G1
AD_G0
AD_B7
AD_B6
AD_B5
AD_B4
AD_B3
AD_B2
AD_B1
AD_B0
[RMX4A]
RM344
RM340
RM342
RM341
RM343
RM345
A_GND
D_GND
F_GND
5V_REG2
9V_1
3.3V_A
UREG
[LPQ1MXX5]
IC410
PQ1M335M2SPQ
RGL
[L78L05]
IC773
IN
OUT
COM
FL340
FL341
FL342
FL343
NOT MOUNT
MOUNT
46WM48P
SCALER
3chADC1
SH. NO.
018


3.3VS_2
FDC602P_NF40
DP001
[TP]
[MFPF]
Q3131
S
D
G
L2137
220ohm
[MFPF]
Q3130
1.5
L2130
C6K3L-100
10uH(X)
1.5VS_2
L2136
220ohm
R2136
51K(F)
R2137
1K(F)
C2131
6.3V
220uF(M)
[CP]
DP003
[TP]
GND_D
[L6365]
IC708
CE
EXT
FB
VDD
GND
XC6365B103MR
[SBD]
D2130
CMS02(TE12L)
R2131
100K(F)
C2130
56pF(J)
R2140
6.8K(J)
R2130
200K(F)
DP002
[TP]
[CP]
C2133
6.3V
100uF(M)
DP004
[TP]
C2132
6.3V
4.7uF(K)
C2134
10V
2.2uF(K)
R2139
1K(F)
C2160
1uF(K)
6.3V
Q3132
2SC4116-Y(TE85L)
C
B
E
R2138
33K(F)
R2135
51K(F)
W2127
W2126
L2155
22ohm
100MHz
D_GND
GND_D
46WM48P
SCALER
DC/DC CONVERTER
SH. NO.
019

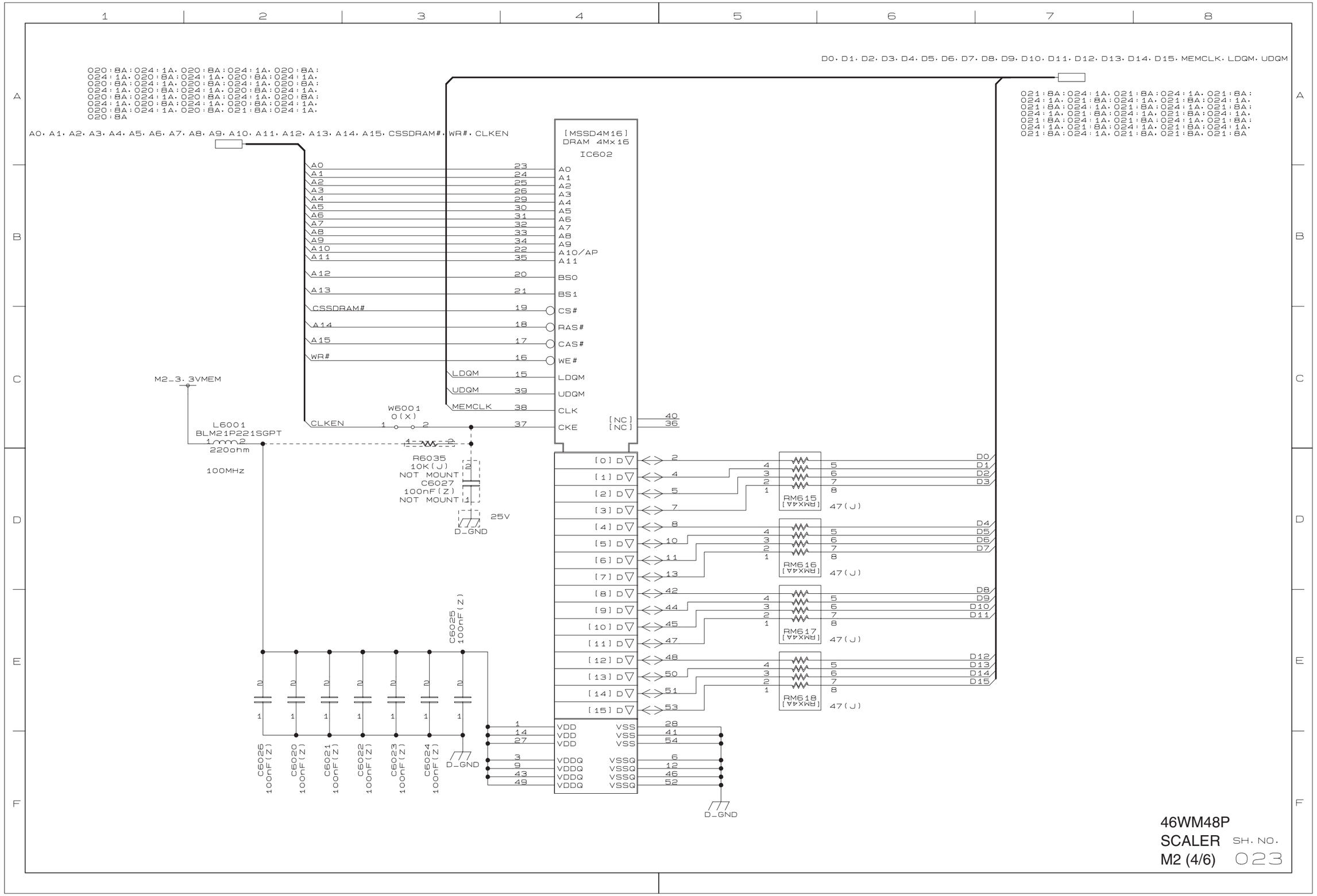


46WM48P
SCALER SH. NO. 020
M2 (1/6)


SDA6001 2/3
[U6001]
IC600
P3.4/DIG.R01
P3.5/DIG.R02
P3.6/DIG.R03
P3.7/DIG.R04
P3.12/DIG.R05
P3.15/DIG.G00
P5.14/DIG.G01
P5.15/DIG.G02
P6.0/DIG.G03
P6.1/DIG.G04
P6.2/DIG.G05
P2.9/DIG.B01
P2.10/DIG.B02
P2.11/DIG.B03
P2.12/DIG.B04
P2.13/DIG.B05
P2.14
P2.8
P2.15
P3.8
P3.9
P3.10/TXDO
P3.11/RXDO
P3.13
MEMCLK
WR
LDQM
UDQM
D0
D1
D2
D3
D4
D5
D6
D7
D8
D9
D10
D11
D12
D13
D14
D15
ANA.R_OUT
ANA.G_OUT
ANA.B_OUT
COR
BLANK
M2_R1
M2_R2
M2_R3
M2_R4
M2_R5
M2_G0
M2_G1
M2_G2
M2_G3
M2_G4
M2_G5
M2_B1
M2_B2
M2_B3
M2_B4
M2_B5
MAIN_SYNC_DET
EXT_MUTE
DOOR_OPEN
M2_3.3V_D
ON_TIMER
POW_DET
M2_TXD
M2_RXD
POW
RM612 [RMX4A] 33(J)
RM613 [RMX4A] 33(J)
RM614 [RMX4A] 33(J)
R6024 33(J)
R6025 33(J)
R6026 33(J)
R6027 33(J)
R6028 1K(J)
R6029 1K(J)
R6030 1K(J)
R6034 10K(J)
R6031 100(J)
R6032 1K(J)
R6021 100(J)
R6020 100(J)
R6033 10K(J)
MEMCLK, UDQM, LDQM, WR#
D0, D1, D2, D3, D4, D5, D6, D7, D8, D9, D10, D11, D12, D13, D14, D15
R6019 100(J)
M2_MEMCLK
MEMCLK ON
RM610 [RMX4A] 47(J)
RM607 [RMX4A] 47(J)
RM608 [RMX4A] 47(J)
RM609 [RMX4A] 47(J)
31mW
RM611 [RMX4A] 47(J)
R6022 33(J)
R6023 33(J)
M2_COR
M2_BLANK
YM_OSD
YS_OSD
46WM48P
SCALER SH. NO.
M2 (2/6) 021



46WM48P
SCALER SH. NO.
M2 (3/6) 022


D0, D1, D2, D3, D4, D5, D6, D7, D8, D9, D10, D11, D12, D13, D14, D15, MEMCLK, LDQM, UDQM
020:8A:024:1A:020:8A:024:1A:020:8A:
024:1A:020:8A:024:1A:020:8A:024:1A:
020:8A:024:1A:020:8A:024:1A:020:8A:
024:1A:020:8A:024:1A:020:8A:024:1A:
020:8A:024:1A:020:8A:024:1A:020:8A:
024:1A:020:8A:024:1A:020:8A:024:1A:
020:8A:024:1A:020:8A:021:8A:024:1A:
020:8A
021:8A:024:1A:021:8A:024:1A:021:8A:
024:1A:021:8A:024:1A:021:8A:024:1A:
021:8A:024:1A:021:8A:024:1A:021:8A:
024:1A:021:8A:024:1A:021:8A:024:1A:
021:8A:024:1A:021:8A:024:1A:021:8A:
024:1A:021:8A:024:1A:021:8A:024:1A:
021:8A:024:1A:021:8A:021:8A:021:8A
A0, A1, A2, A3, A4, A5, A6, A7, A8, A9, A10, A11, A12, A13, A14, A15, CSSDRAM#, WR#, CLKEN
[MSSD4M16]
DRAM 4Mx16
IC602
A0 23
A1 24
A2 25
A3 26
A4 29
A5 30
A6 31
A7 32
A8 33
A9 34
A10 22
A11 35
A12 20
A13 21
CSSDRAM# 19
A14 18
A15 17
WR# 16
LDQM 15
UDQM 39
MEMCLK 38
CLKEN 37
A0
A1
A2
A3
A4
A5
A6
A7
A8
A9
A10/AP
A11
BS0
BS1
CS#
RAS#
CAS#
WE#
LDQM
UDQM
CLK
CKE
[NC] 40
[NC] 36
M2_3.3VMEM
L6001
BLM21P221SGPT
220ohm
100MHz
W6001
0(X)
R6035
10K(J)
NOT MOUNT
C6027
100nF(Z)
NOT MOUNT
25V
D_GND
C6025
100nF(Z)
C6026
100nF(Z)
C6020
100nF(Z)
C6021
100nF(Z)
C6022
100nF(Z)
C6023
100nF(Z)
C6024
100nF(Z)
D_GND
[0] D 2
[1] D 4
[2] D 5
[3] D 7
[4] D 8
[5] D 10
[6] D 11
[7] D 13
[8] D 42
[9] D 44
[10] D 45
[11] D 47
[12] D 48
[13] D 50
[14] D 51
[15] D 53
RM615 47(J)
RM616 47(J)
RM617 47(J)
RM618 47(J)
D0 D1 D2 D3
D4 D5 D6 D7
D8 D9 D10 D11
D12 D13 D14 D15
VDD 1
VDD 14
VDD 27
VDDQ 3
VDDQ 9
VDDQ 43
VDDQ 49
VSS 28
VSS 41
VSS 54
VSSQ 6
VSSQ 12
VSSQ 46
VSSQ 52
D_GND
46WM48P
SCALER SH. NO.
M2 (4/6) 023

A0. A1. A2. A3. A4. A5. A6. A7. A8. A9. A10. A11. A12. A13. A14. A15. A16. A17. A18. A19. CSROM#. D0. D1. D2. D3. D4. D5. D6. D7. D8. D9. D10. D11. D12. D13. D14. D15. RD#. WR#

A[0:15], D[0:15], CSROM#, RD#, WR#

MX29LV160BTTC-70G

[MFLV160C]
IC603

A0 25 A0
A1 24 A1
A2 23 A2
A3 22 A3
A4 21 A4
A5 20 A5
A6 19 A6
A7 18 A7
A8 8 A8
A9 7 A9
A10 6 A10
A11 5 A11
A12 4 A12
A13 3 A13
A14 2 A14
A15 1 A15
A16 48 A16
A17 17 A17
A18 16 A18
A19 9 A19

RY/BYN 15

W6004 0(X)

CSROM# 1 2 26 CEN
RD# 28 OEN
WR# 11 WEN
M2_RST 12 RPN
47 BYTEN

NC 10
NC 13
NC 14

W6002
NOT MOUNT

W6005
NOT MOUNT

W6003
0(X)

D0 29 D0
D1 31 D1
D2 33 D2
D3 35 D3
D4 38 D4
D5 40 D5
D6 42 D6
D7 44 D7
D8 30 D8
D9 32 D9
D10 34 D10
D11 36 D11
D12 39 D12
D13 41 D13
D14 43 D14
D15/A-1 45 D15

020:2A:025:6C:027:3B:053:8B

M2_3.3VMEM

L6002
BLM11A601SPT

37 [Vcc]
[GND] 27
[GND] 46

C6028
100nF(Z)

D_GND

NOT MOUNT

[MUSSR1M16]
IC604

A0 11 A0
A1 10 A1
A2 9 A2
A3 8 A3
A4 7 A4
A5 48 A5
A6 47 A6
A7 46 A7
A8 45 A8
A9 44 A9
A10 38 A10
A11 37 A11
A12 36 A12
A13 35 A13
A14 34 A14
A15 21 A15
A16 20 A16
A17 19 A17
A18 18 A18
A19 17 A19

W6006 0(X)

CSROM# 13 CE
RD# 42 OE
WR# 15 WE
39 LB
12 UB

W6007
NOT MOUNT

D_GND

D1 22 D1
D2 24 D2
D3 25 D3
D4 27 D4
D5 28 D5
D6 30 D6
D7 31 D7
D8 33 D8
D9 49 D9
D10 51 D10
D11 52 D11
D12 54 D12
D13 1 D13
D14 3 D14
D15 4 D15
D16 6 D16

40 NU
16 NC
43 NC

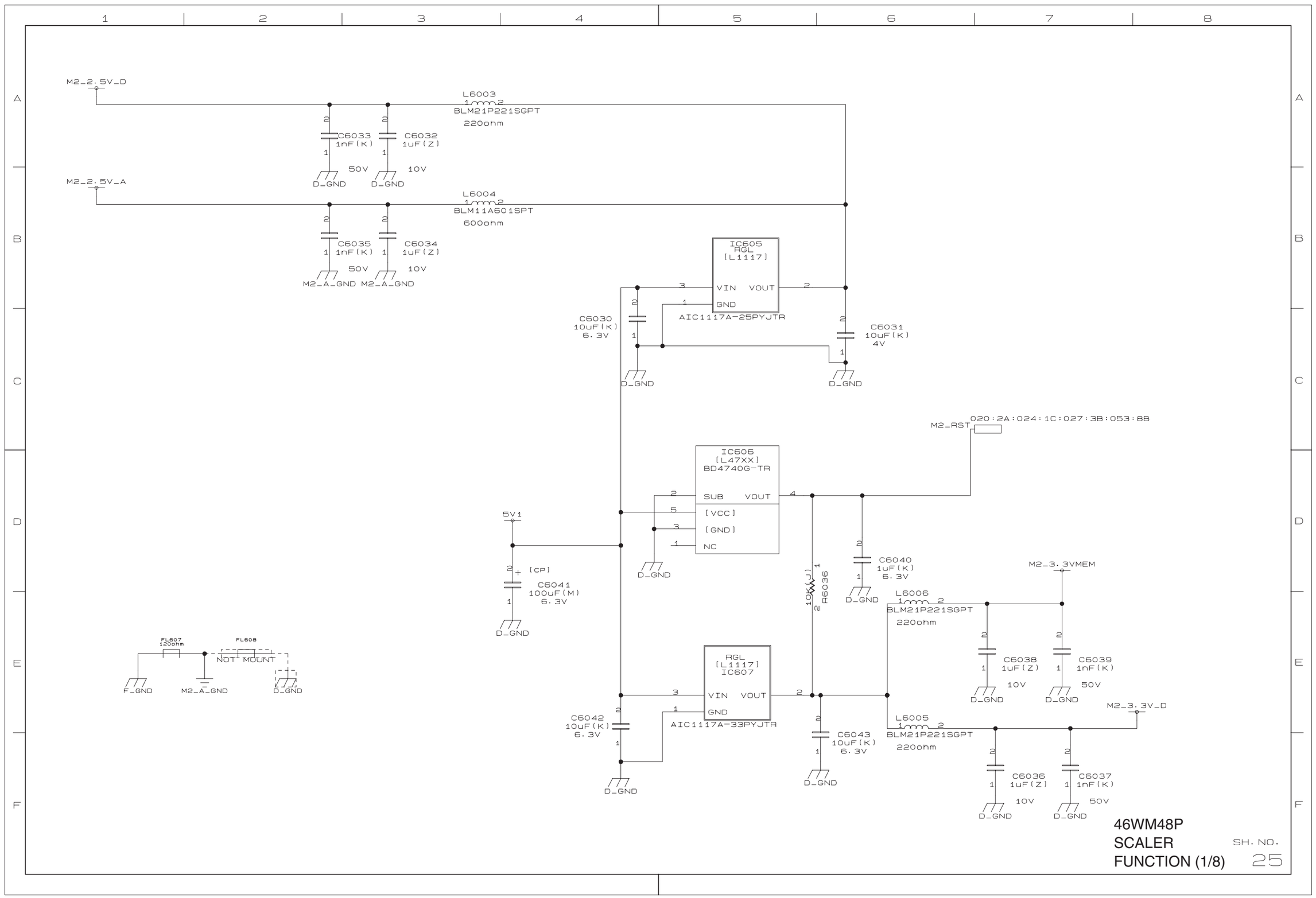
2 VDD GND 5
14 VDD GND 26
23 VDD GND 32
29 VDD GND 41
50 VDD GND 53

M2_3.3VMEM

C6029
100nF(Z)

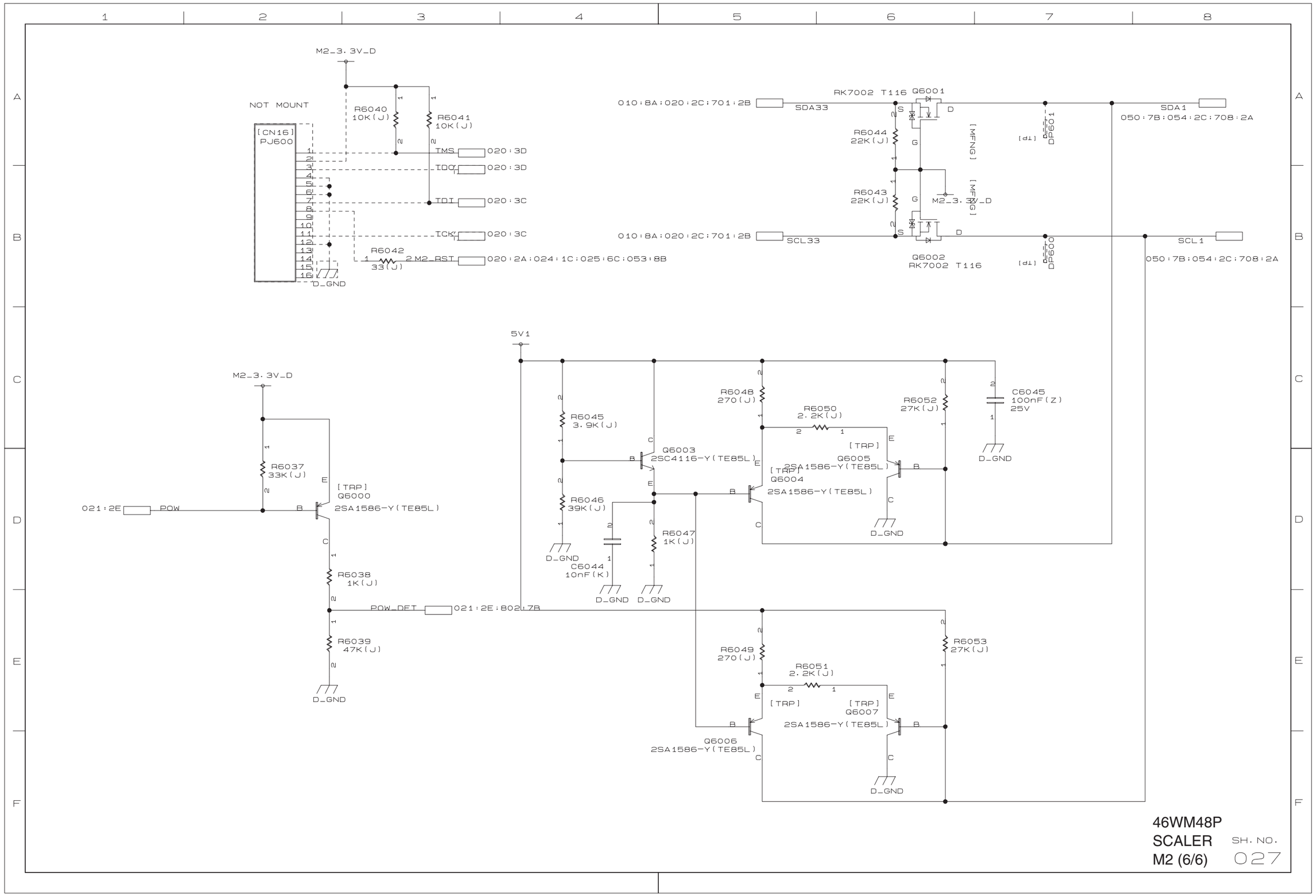
D_GND

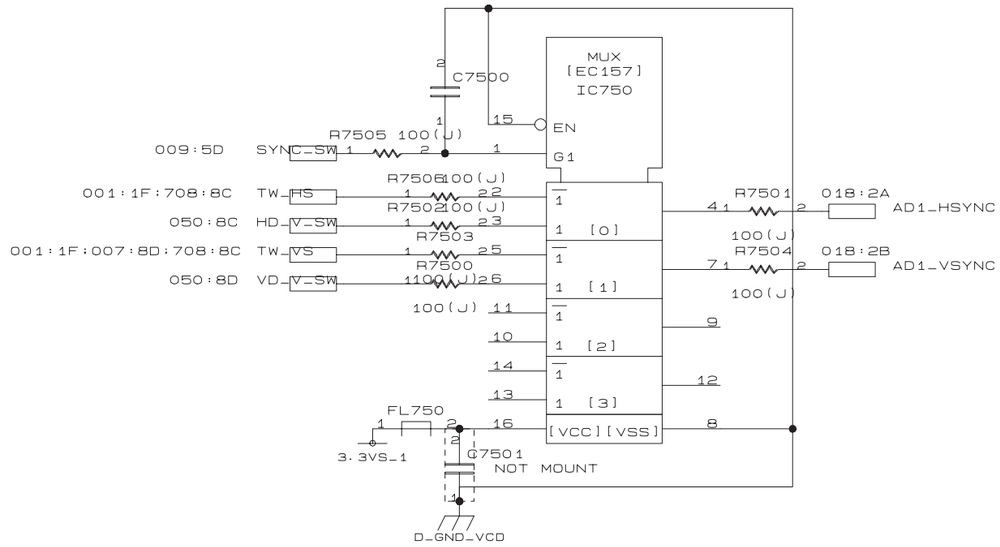
46WM48P
SCALER SH. NO.
M2 (5/6) 24



46WM48P
SCALER
FUNCTION (1/8)

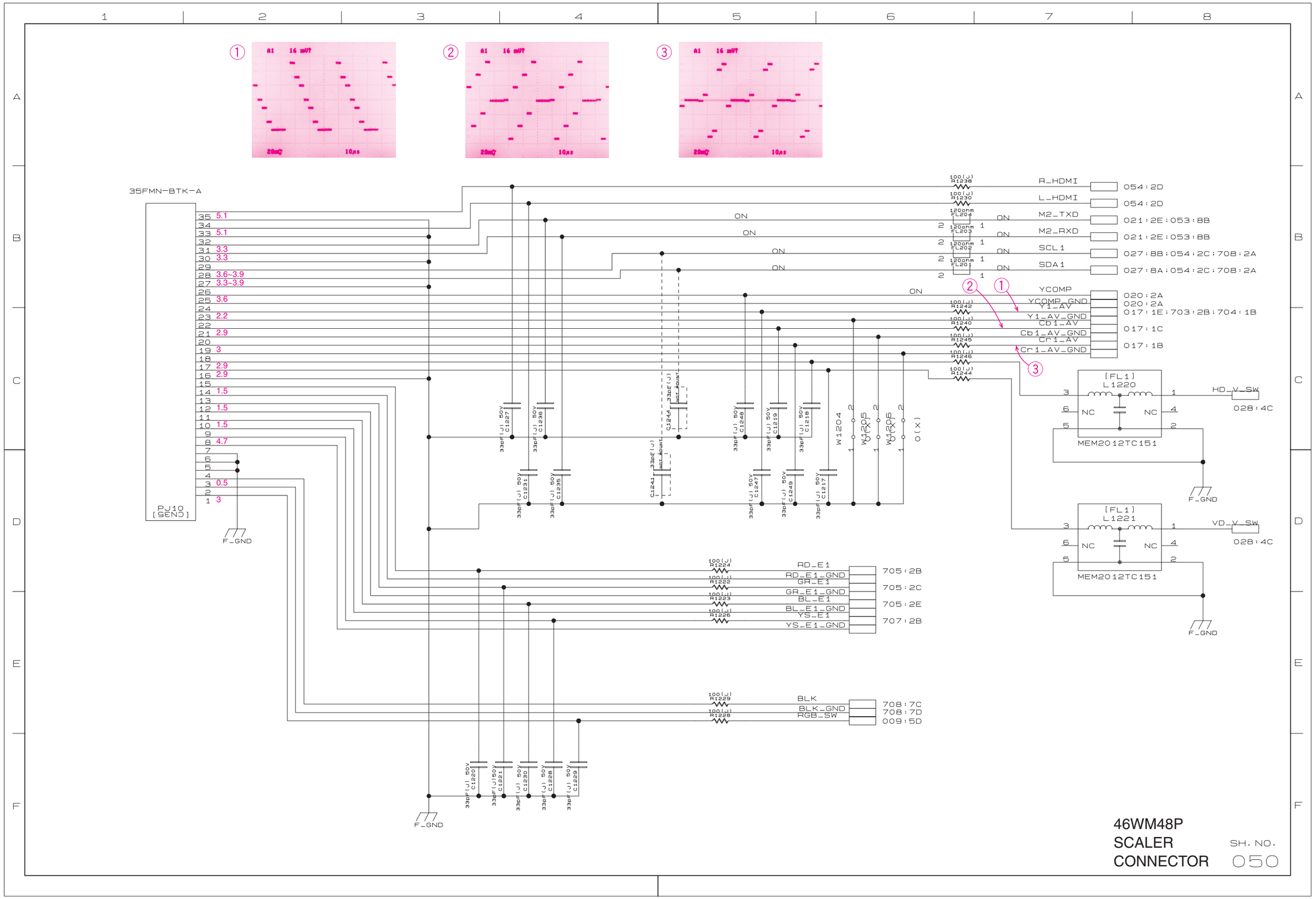
SH. NO. 25

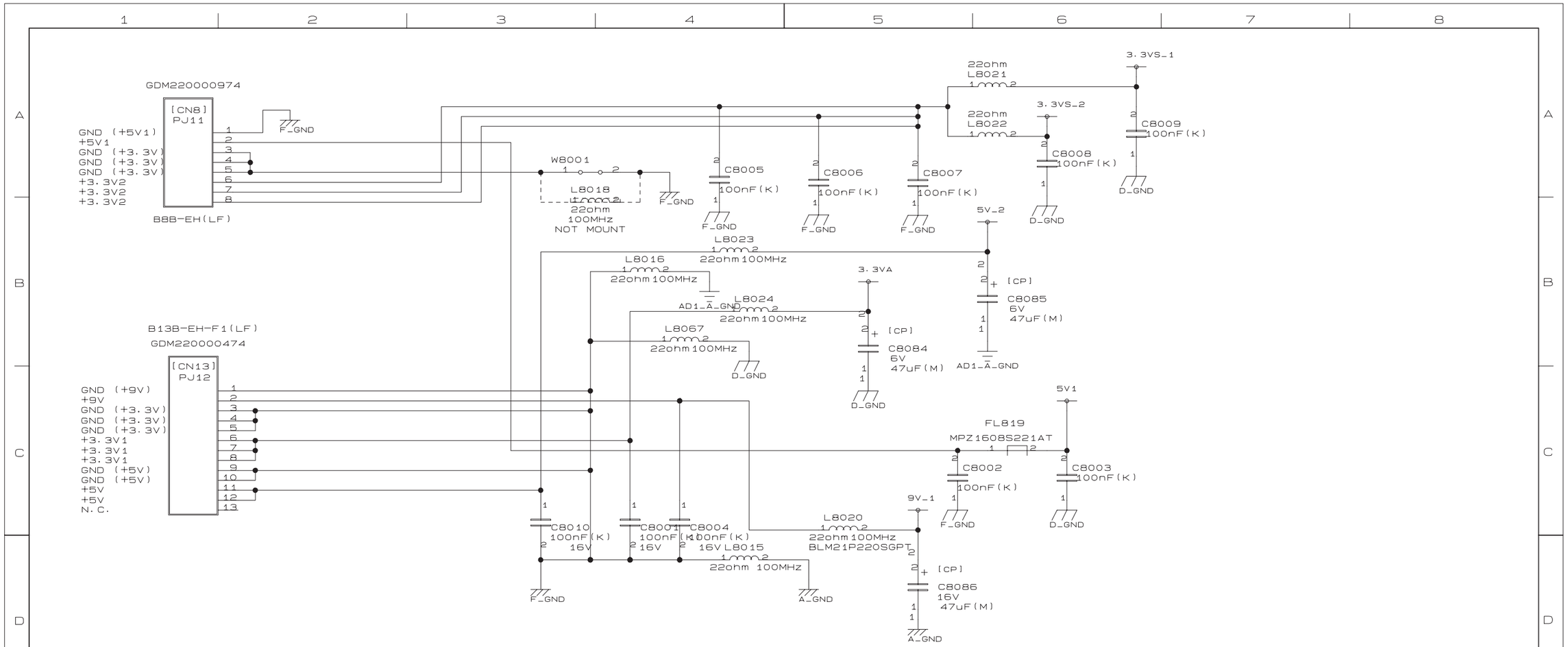

M2_3.3V_D
NOT MOUNT
R6040
10K(J)
R6041
10K(J)
[CN16]
PJ600
TMS
020:3D
TDO
020:3D
TDI
020:3C
TCK
020:3C
R6042
33(J)
M2_RST
020:2A:024:1C:025:6C:053:8B
D_GND
RK7002 T116
Q6001
010:8A:020:2C:701:2B
SDA33
R6044
22K(J)
R6043
22K(J)
M2_3.3V_D
[MFNG]
[MFNG]
[TP]
DP601
SDA1
050:7B:054:2C:708:2A
010:8A:020:2C:701:2B
SCL33
Q6002
RK7002 T116
[TP]
DP600
SCL1
050:7B:054:2C:708:2A
5V1
R6048
270(J)
R6050
2.2K(J)
R6052
27K(J)
C6045
100nF(Z)
25V
R6045
3.9K(J)
Q6003
2SC4116-Y(TE85L)
[TRP]
Q6005
2SA1586-Y(TE85L)
[TRP]
Q6004
2SA1586-Y(TE85L)
D_GND
D_GND
M2_3.3V_D
R6037
33K(J)
[TRP]
Q6000
2SA1586-Y(TE85L)
021:2E
POW
R6046
39K(J)
R6047
1K(J)
C6044
10nF(K)
D_GND
D_GND
R6038
1K(J)
POW_DET
021:2E:802:7B
R6039
47K(J)
D_GND
R6049
270(J)
R6051
2.2K(J)
R6053
27K(J)
[TRP]
Q6007
2SA1586-Y(TE85L)
Q6006
2SA1586-Y(TE85L)
D_GND
D_GND
46WM48P
SCALER
M2 (6/6)
SH. NO.
027



46WM48P
SCALER
SYNC_SW

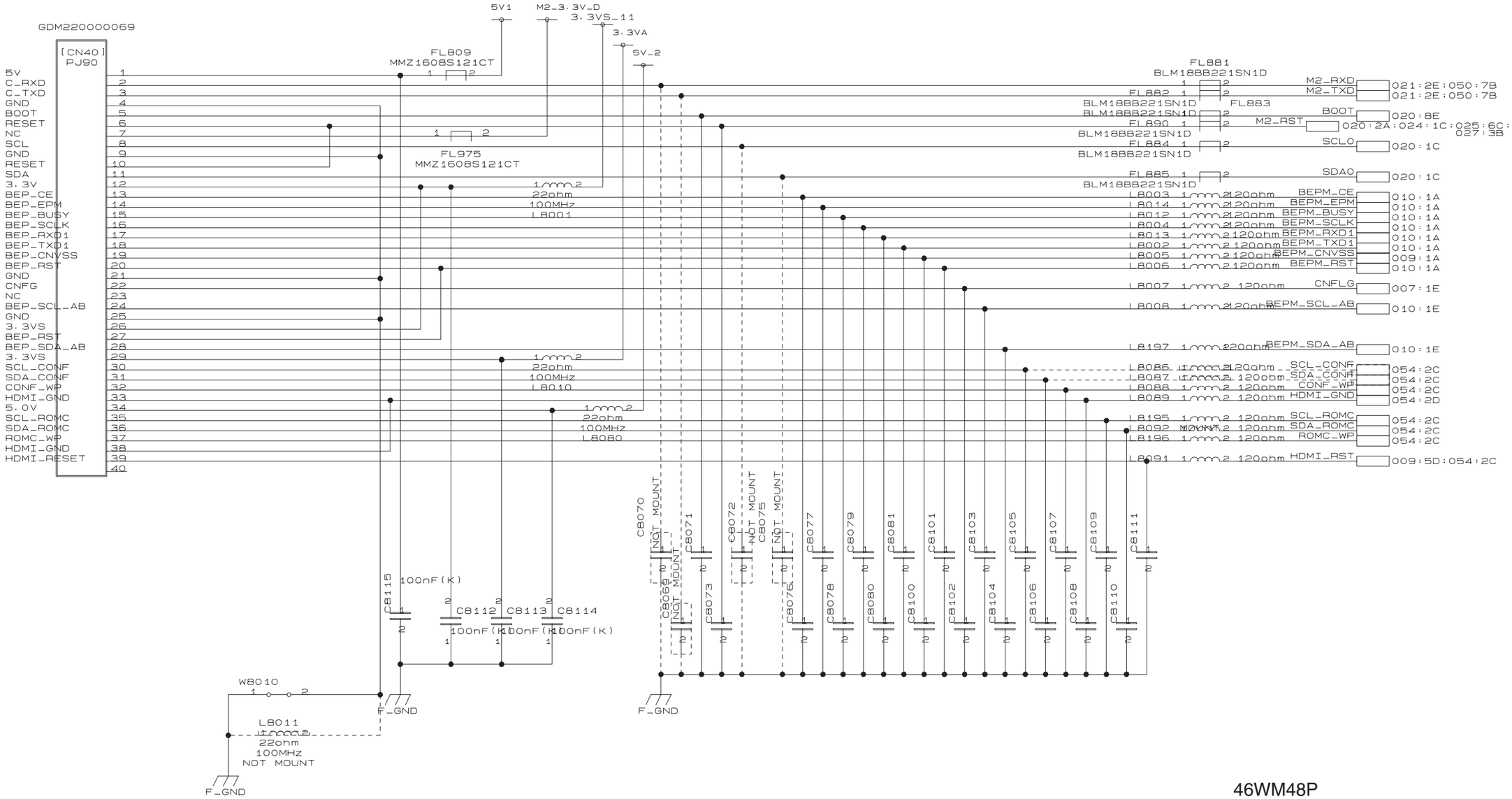
SH. NO.
028

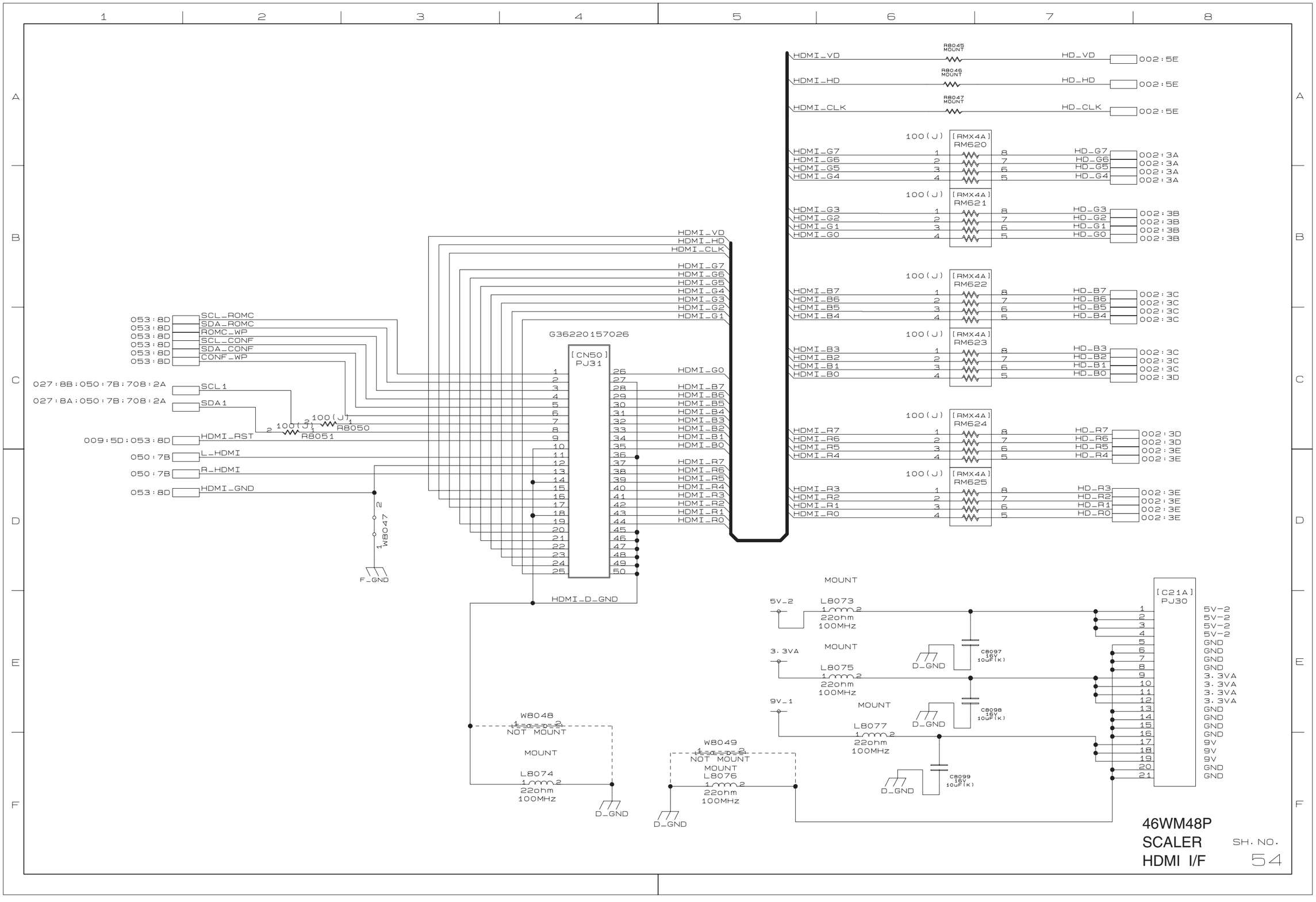

35FMN-BTK-A
PJ10 [SENS]
F_GND
R_HDMI
L_HDMI
M2_TXD
M2_RXD
SCL1
SDA1
YCOMP
YCOMP_GND
Y1_AV
Y1_AV_GND
CB1_AV
CB1_AV_GND
CR1_AV
CR1_AV_GND
RD_E1
RD_E1_GND
GR_E1
GR_E1_GND
BL_E1
BL_E1_GND
YS_E1
YS_E1_GND
BLK
BLK_GND
RGB_SW
HD_V_SW
VD_V_SW
[FL1] L1220
[FL1] L1221
MEM2012TC151
NC
ON
054:2D
021:2E:053:8B
027:8B:054:2C:708:2A
027:8A:054:2C:708:2A
020:2A
017:1E:703:2B:704:1B
017:1C
017:1B
705:2B
705:2C
705:2E
707:2B
708:7C
708:7D
009:5D
028:4C
46WM48P
SCALER
CONNECTOR
SH. NO.
050

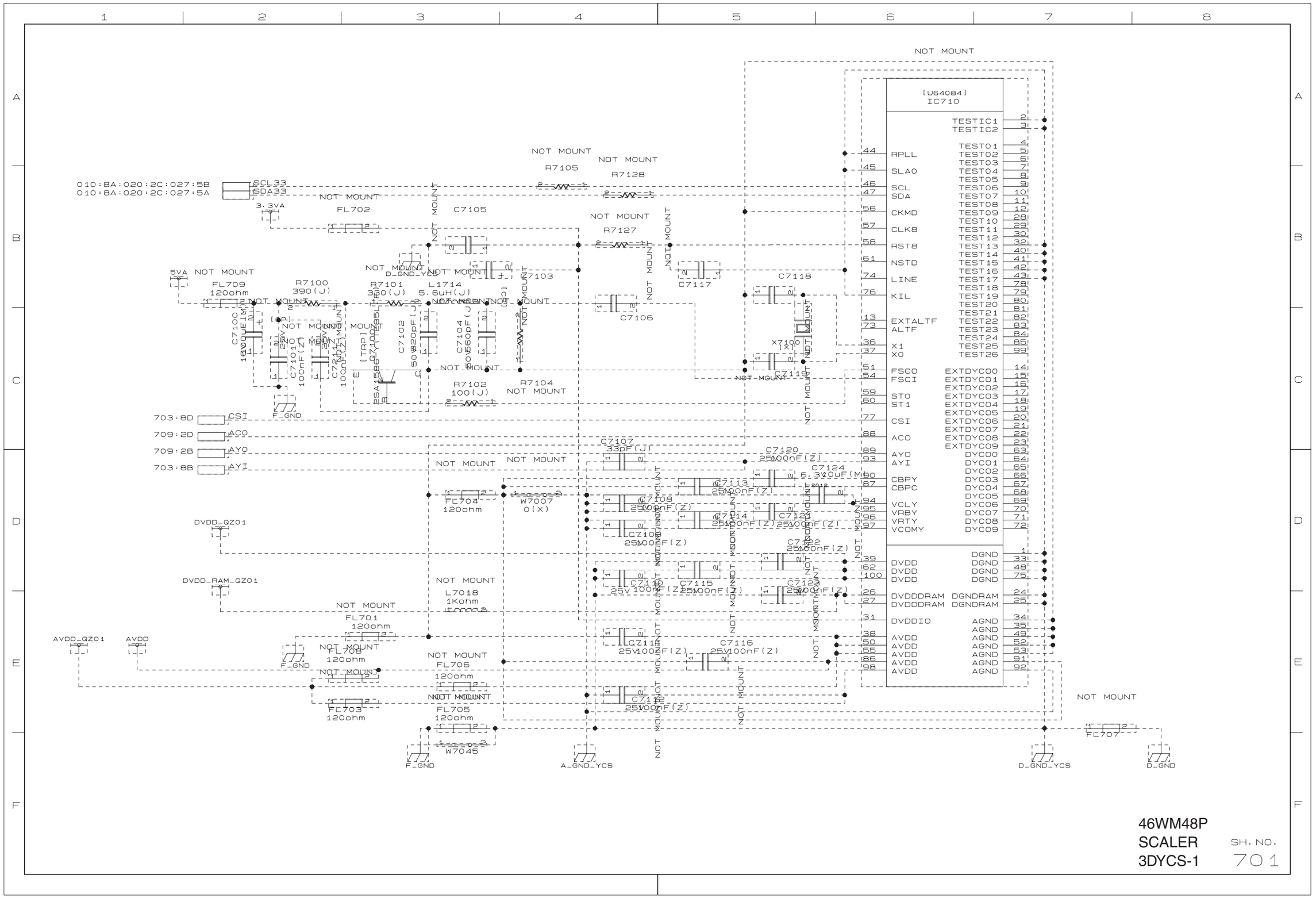


46WM48P
SCALER
POWER_CONNECTOR

SH. NO. 51

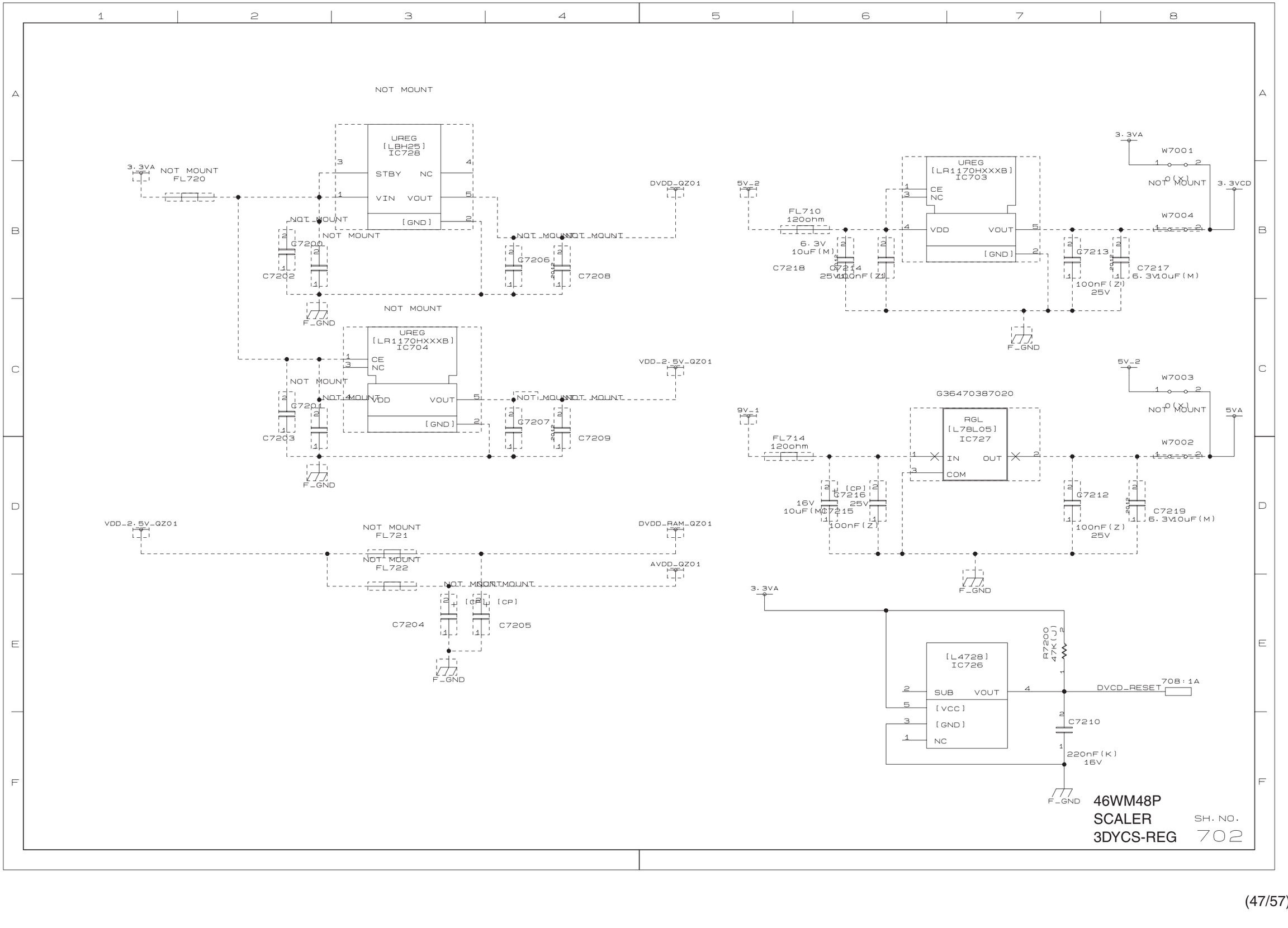

GDM220000069
[CN40]
PJ90
5V
C_RXD
C_TXD
GND
BOOT
RESET
NC
SCL
GND
RESET
SDA
3.3V
BEP_CE
BEP_EPM
BEP_BUSY
BEP_SCLK
BEP_RXD1
BEP_TXD1
BEP_CNVSS
BEP_RST
GND
CNFG
NC
BEP_SCL_AB
GND
3.3VS
BEP_RST
BEP_SDA_AB
3.3VS
SCL_CONF
SDA_CONF
CONF_WP
HDMI_GND
5.0V
SCL_ROMC
SDA_ROMC
ROMC_WP
HDMI_GND
HDMI_RESET
5V1
M2_3.3V_D
3.3VS_11
3.3VA
5V_2
FL809
MMZ1608S121CT
FL975
MMZ1608S121CT
L8001
L8010
L8080
22ohm
100MHz
W8010
L8011
NOT MOUNT
F_GND
C8115
100nF(K)
C8112
C8113
C8114
C8070
C8069
C8071
C8072
C8075
C8073
C8076
C8077
C8078
C8079
C8080
C8081
C8100
C8101
C8102
C8103
C8104
C8105
C8106
C8107
C8108
C8109
C8110
C8111
FL881
BLM18BB221SN1D
FL882
FL883
FL890
FL884
FL885
L8003
L8014
L8012
L8004
L8013
L8002
L8005
L8006
L8007
L8008
L8197
L8086
L8087
L8088
L8089
L8195
L8092
L8196
L8091
120ohm
M2_RXD
M2_TXD
BOOT
M2_RST
SCLO
SDAO
BEPM_CE
BEPM_EPM
BEPM_BUSY
BEPM_SCLK
BEPM_RXD1
BEPM_TXD1
BEPM_CNVSS
BEPM_RST
CNFLG
BEPM_SCL_AB
BEPM_SDA_AB
SCL_CONF
SDA_CONF
CONF_WP
HDMI_GND
SCL_ROMC
SDA_ROMC
ROMC_WP
HDMI_RST
021:2E:050:7B
021:2E:050:7B
020:8E
020:2A:024:1C:025:6C:027:3B
020:1C
020:1C
010:1A
010:1A
010:1A
010:1A
010:1A
010:1A
009:1A
010:1A
007:1E
010:1E
010:1E
054:2C
054:2C
054:2C
054:2D
054:2C
054:2C
054:2C
009:5D:054:2C
46WM48P
SCALER
SERVICE CONNECTOR
SH. NO.
53

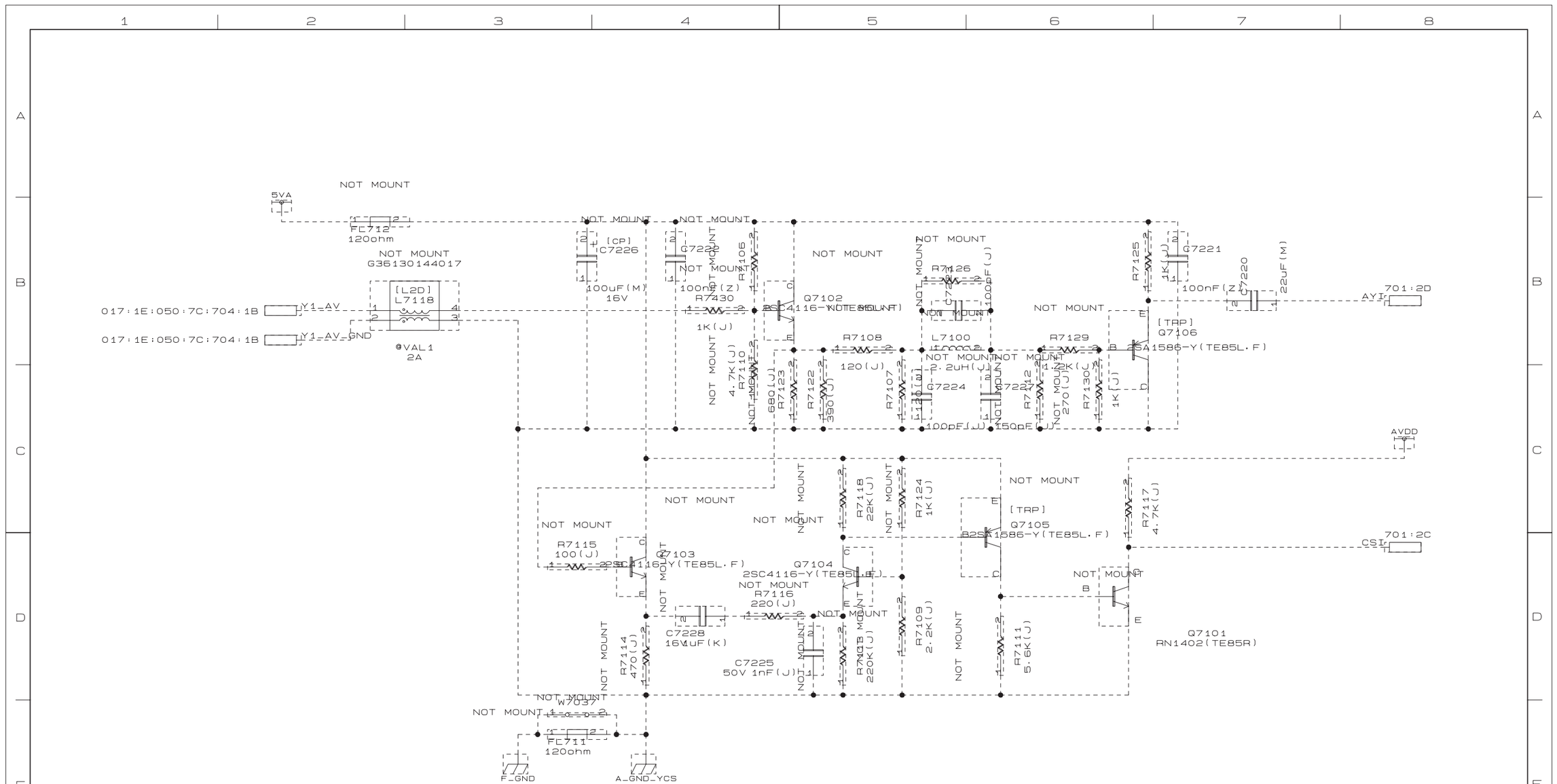

HDMI_VD
HDMI_HD
HDMI_CLK
HDMI_G7
HDMI_G6
HDMI_G5
HDMI_G4
HDMI_G3
HDMI_G2
HDMI_G1
G36220157026
[CN50]
PJ31
HDMI_G0
HDMI_B7
HDMI_B6
HDMI_B5
HDMI_B4
HDMI_B3
HDMI_B2
HDMI_B1
HDMI_B0
HDMI_R7
HDMI_R6
HDMI_R5
HDMI_R4
HDMI_R3
HDMI_R2
HDMI_R1
HDMI_R0
HDMI_D_GND
053:8D SCL_ROMC
053:8D SDA_ROMC
053:8D ROMC_WP
053:8D SCL_CONF
053:8D SDA_CONF
053:8D CONF_WP
027:8B:050:7B:708:2A SCL1
027:8A:050:7B:708:2A SDA1
100(J) R8050
100(J) R8051
009:5D:053:8D HDMI_RST
050:7B L_HDMI
050:7B R_HDMI
053:8D HDMI_GND
W8047
F_GND
R8045 MOUNT
R8046 MOUNT
R8047 MOUNT
HD_VD
HD_HD
HD_CLK
002:5E
100(J) [RMX4A] RM620
HD_G7
HD_G6
HD_G5
HD_G4
002:3A
100(J) [RMX4A] RM621
HD_G3
HD_G2
HD_G1
HD_G0
002:3B
100(J) [RMX4A] RM622
HD_B7
HD_B6
HD_B5
HD_B4
002:3C
100(J) [RMX4A] RM623
HD_B3
HD_B2
HD_B1
HD_B0
002:3C
002:3D
100(J) [RMX4A] RM624
HD_R7
HD_R6
HD_R5
HD_R4
002:3D
002:3E
100(J) [RMX4A] RM625
HD_R3
HD_R2
HD_R1
HD_R0
002:3E
W8048 NOT MOUNT
MOUNT
L8074 22ohm 100MHz
D_GND
W8049 NOT MOUNT
MOUNT
L8076 22ohm 100MHz
D_GND
MOUNT
5V_2
L8073 22ohm 100MHz
C8097 16V 10uF(K)
D_GND
3.3VA
L8075 22ohm 100MHz
C8098 16V 10uF(K)
9V_1
L8077 22ohm 100MHz
C8099 16V 10uF(K)
[C21A]
PJ30
5V-2
GND
3.3VA
9V
46WM48P
SCALER
HDMI I/F
SH. NO.
54



46WM48P
SCALER
3DYCS-1

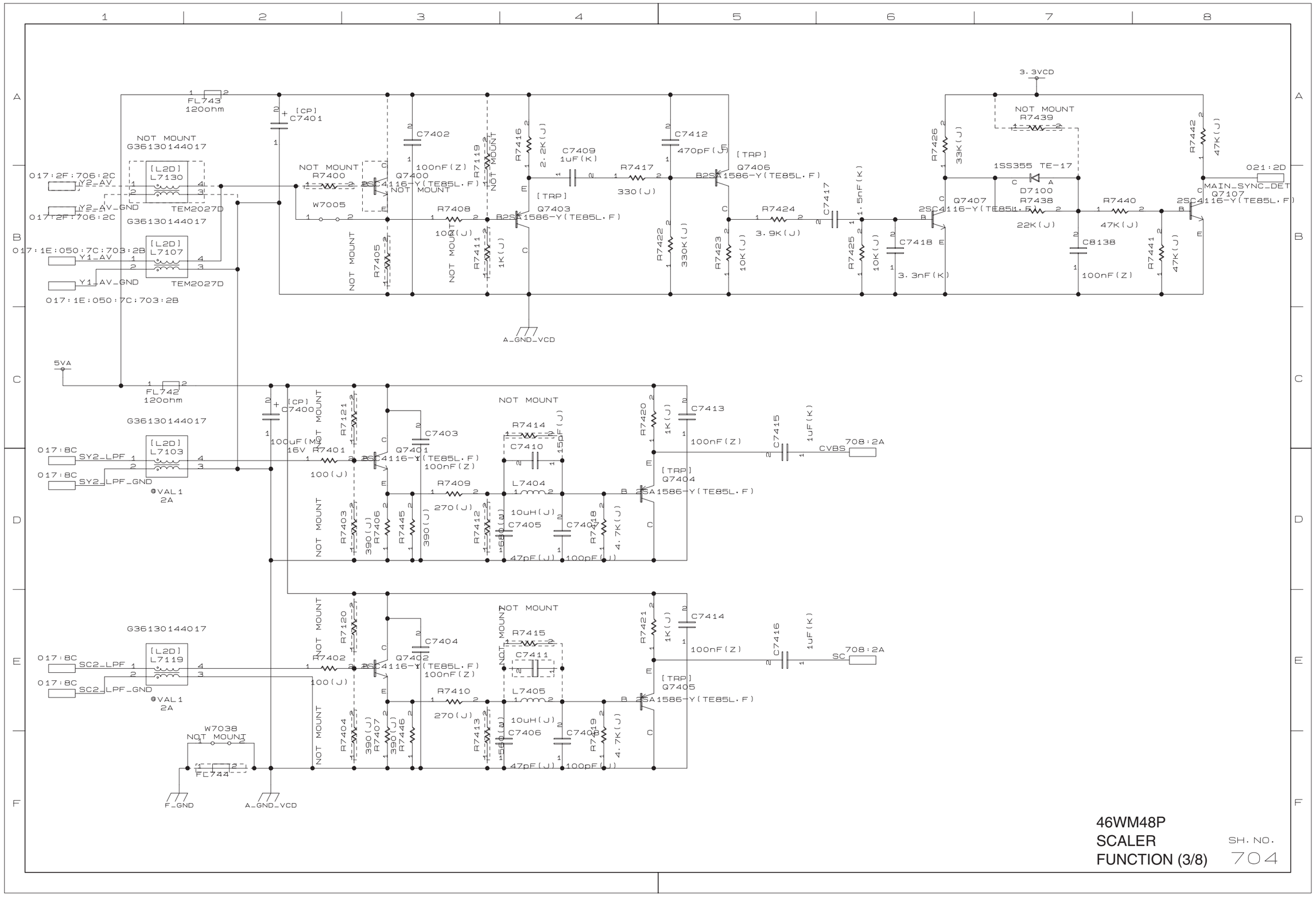
SH. NO.
701

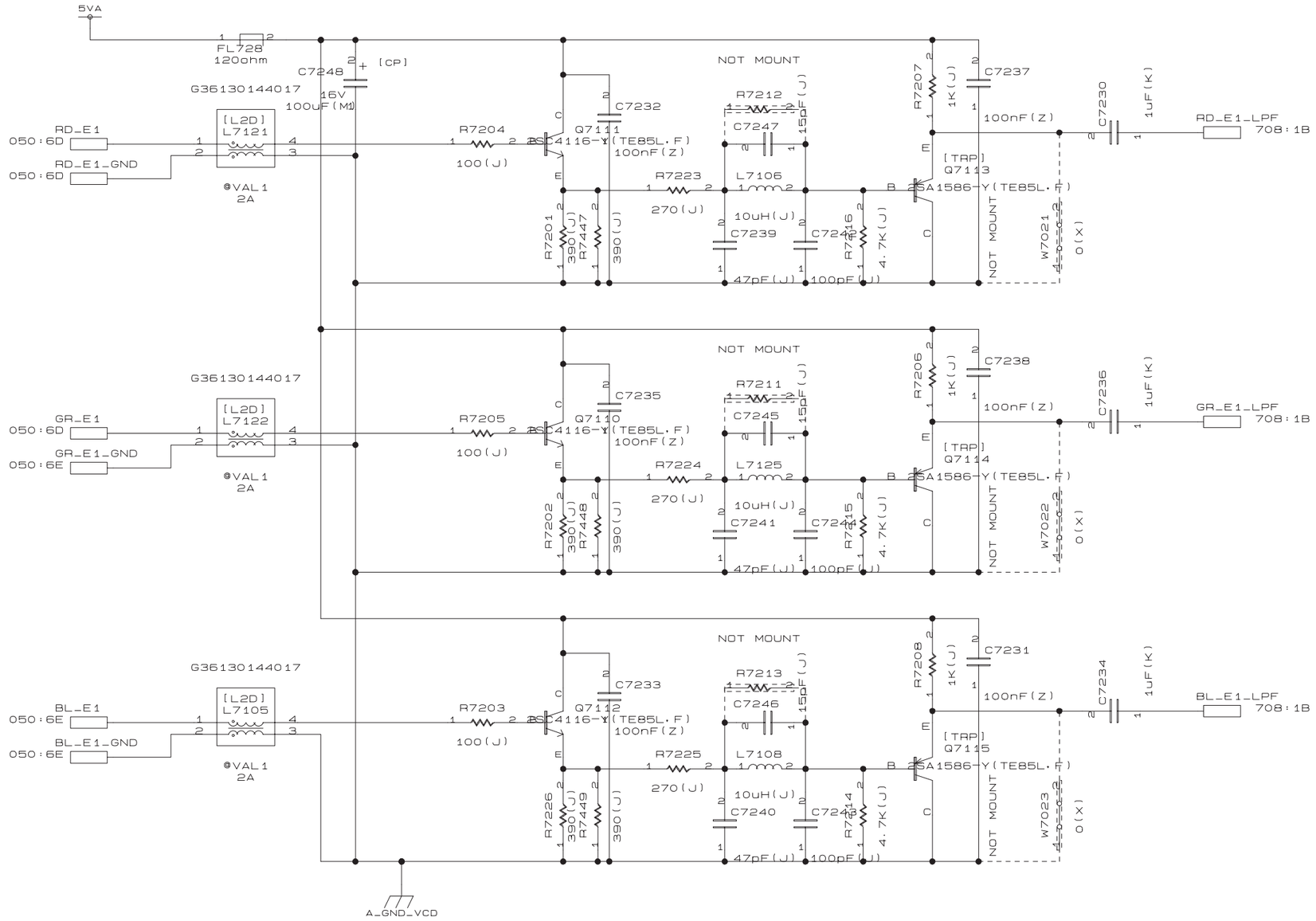

NOT MOUNT
UREG
[LBH25]
IC728
STBY
NC
VIN
VOUT
[GND]
3.3VA
NOT MOUNT
FL720
DVDD_QZ01
NOT MOUNT
C7200
C7202
C7206
C7208
F_GND
UREG
[LR1170HXXXB]
IC704
CE
NC
VDD
VOUT
[GND]
VDD_2.5V_QZ01
C7201
C7203
C7207
C7209
F_GND
VDD_2.5V_QZ01
NOT MOUNT
FL721
DVDD_RAM_QZ01
NOT MOUNT
FL722
AVDD_QZ01
[CP]
C7204
C7205
F_GND
UREG
[LR1170HXXXB]
IC703
5V_2
FL710
120ohm
6.3V
10uF(M)
C7218
C7214
25V 100nF(Z)
C7213
100nF(Z)
25V
C7217
6.3V10uF(M)
F_GND
3.3VA
W7001
NOT MOUNT
3.3VCD
W7004
G36470387020
RGL
[L7805]
IC727
IN
OUT
COM
9V_1
FL714
120ohm
16V
10uF(M)
C7216
25V
C7215
100nF(Z)
C7212
100nF(Z)
25V
C7219
6.3V10uF(M)
F_GND
5V_2
W7003
NOT MOUNT
5VA
W7002
3.3VA
[L4728]
IC726
SUB
VOUT
[VCC]
[GND]
NC
R7200
47K(J)
DVCD_RESET
708:1A
C7210
220nF(K)
16V
F_GND
46WM48P
SCALER
3DYCS-REG
SH. NO.
702



46WM48P
SCALER
FUNCTION (2/8)

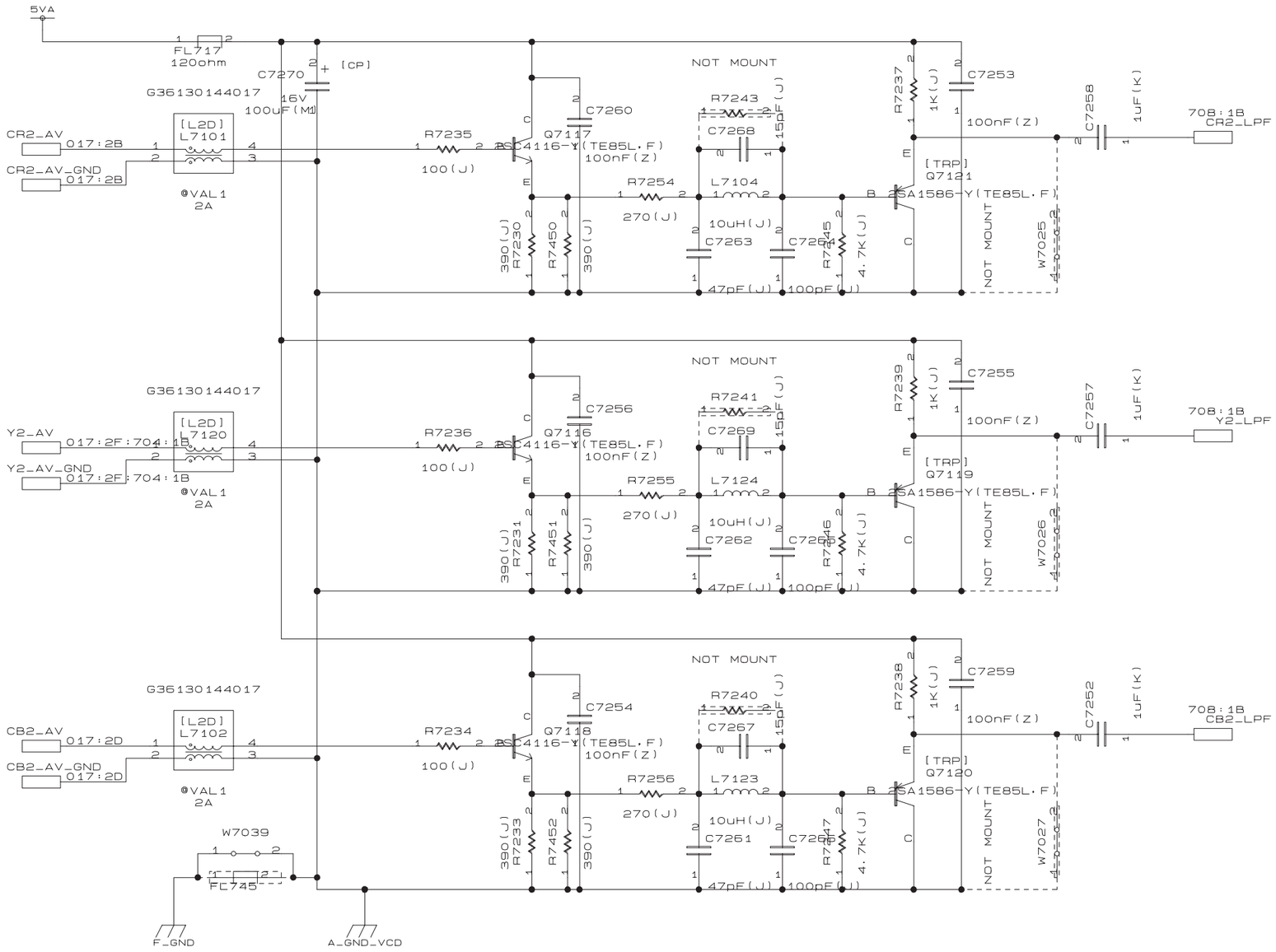
SH. NO.
703


FL743
120ohm
[CP]
C7401
NOT MOUNT
G36130144017
[L2D]
L7130
TEM2027D
017:2F:706:2C
Y2_AV
Y2_AV_GND
017:2F:706:2C
G36130144017
[L2D]
L7107
TEM2027D
017:1E:050:7C:703:2B
Y1_AV
Y1_AV_GND
017:1E:050:7C:703:2B
NOT MOUNT
R7400
Q7400
BSC4116-Y(TE85L,F)
NOT MOUNT
W7005
C7402
100nF(Z)
R7119
NOT MOUNT
R7408
100(J)
R7405
NOT MOUNT
R7411
1K(J)
R7416
2.2K(J)
C7409
1uF(K)
[TRP]
Q7403
B2SA1586-Y(TE85L,F)
R7417
330(J)
C7412
470pF(J)
[TRP]
Q7406
B2SA1586-Y(TE85L,F)
R7422
330K(J)
R7423
10K(J)
R7424
3.9K(J)
C7417
R7425
10K(J)
1.5nF(K)
C7418
3.3nF(K)
A_GND_VCD
3.3VCD
NOT MOUNT
R7439
R7426
33K(J)
1SS355 TE-17
D7100
R7438
22K(J)
R7440
47K(J)
C8138
100nF(Z)
R7441
47K(J)
R7442
47K(J)
021:2D
MAIN_SYNC_DET
Q7107
2SC4116-Y(TE85L,F)
Q7407
2SC4116-Y(TE85L,F)
5VA
FL742
120ohm
G36130144017
[L2D]
L7103
017:8C
SY2_LPF
SY2_LPF_GND
017:8C
@VAL1
2A
[CP]
C7400
100uF(M)
16V
NOT MOUNT
R7401
100(J)
R7121
NOT MOUNT
R7403
390(J)
R7406
390(J)
R7445
390(J)
C7403
Q7401
BSC4116-Y(TE85L,F)
100nF(Z)
R7409
270(J)
R7412
150(J)
NOT MOUNT
R7414
150pF(J)
C7410
L7404
10uH(J)
C7405
47pF(J)
C7408
100pF(J)
R7418
4.7K(J)
[TRP]
Q7404
B2SA1586-Y(TE85L,F)
R7420
1K(J)
C7413
100nF(Z)
C7415
1uF(K)
708:2A
CVBS
G36130144017
[L2D]
L7119
017:8C
SC2_LPF
SC2_LPF_GND
017:8C
@VAL1
2A
NOT MOUNT
R7402
100(J)
R7120
NOT MOUNT
R7404
390(J)
R7407
390(J)
R7446
C7404
Q7402
BSC4116-Y(TE85L,F)
100nF(Z)
R7410
270(J)
R7413
150(J)
NOT MOUNT
R7415
C7411
L7405
10uH(J)
C7406
47pF(J)
C7409
100pF(J)
R7419
4.7K(J)
[TRP]
Q7405
B2SA1586-Y(TE85L,F)
R7421
1K(J)
C7414
100nF(Z)
C7416
1uF(K)
708:2A
SC
W7038
NOT MOUNT
FL744
F_GND
A_GND_VCD
46WM48P
SCALER
FUNCTION (3/8)
SH. NO.
704



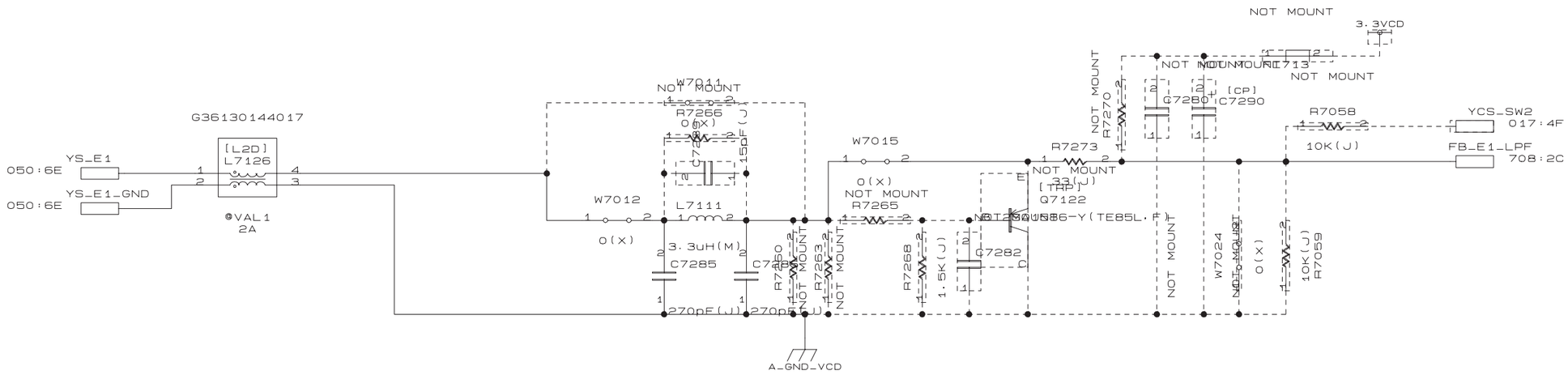
46WM48P
SCALER
FUNCTION (4/8)

SH. NO.
705



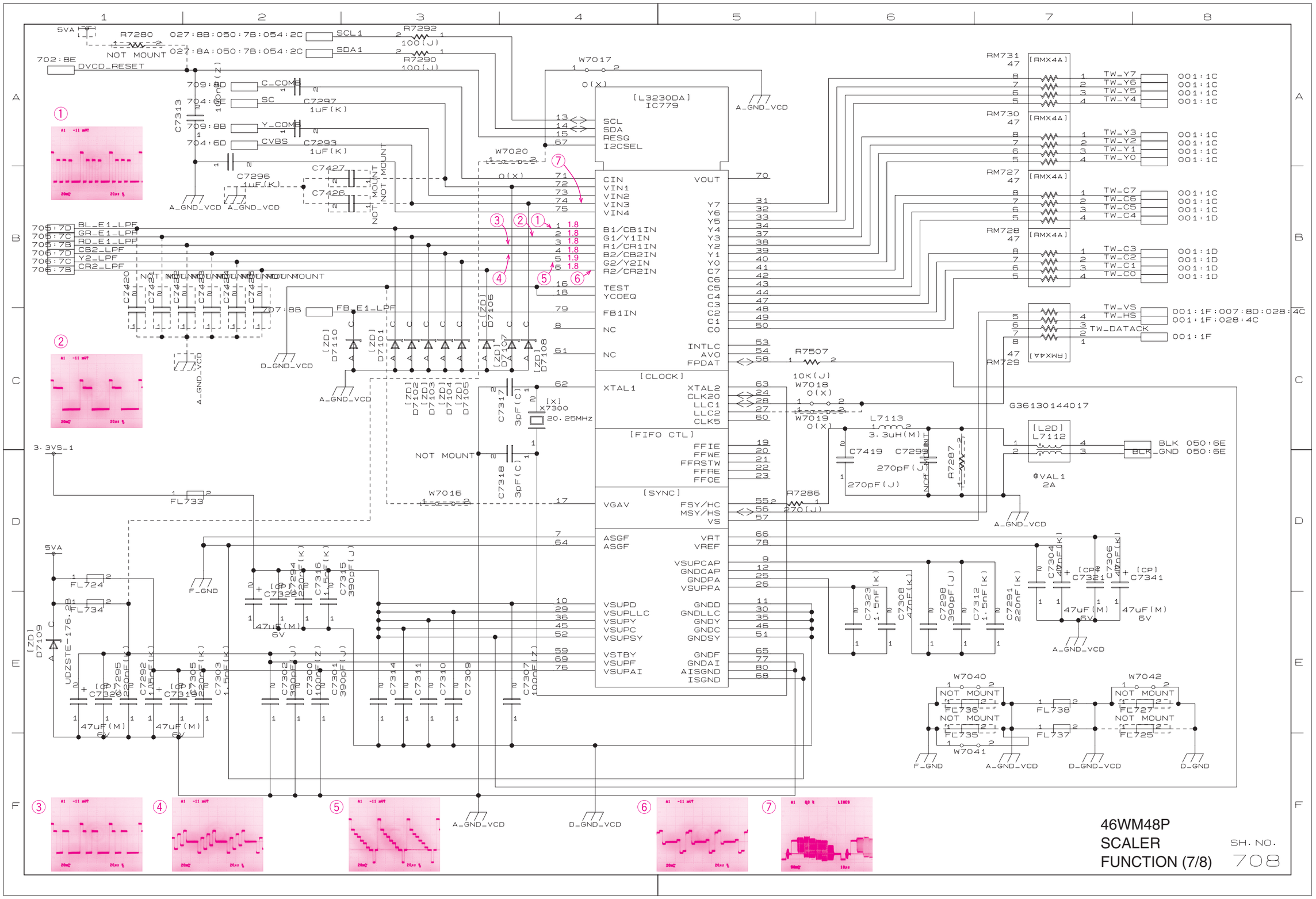
46WM48P
SCALER
FUNCTION (5/8)

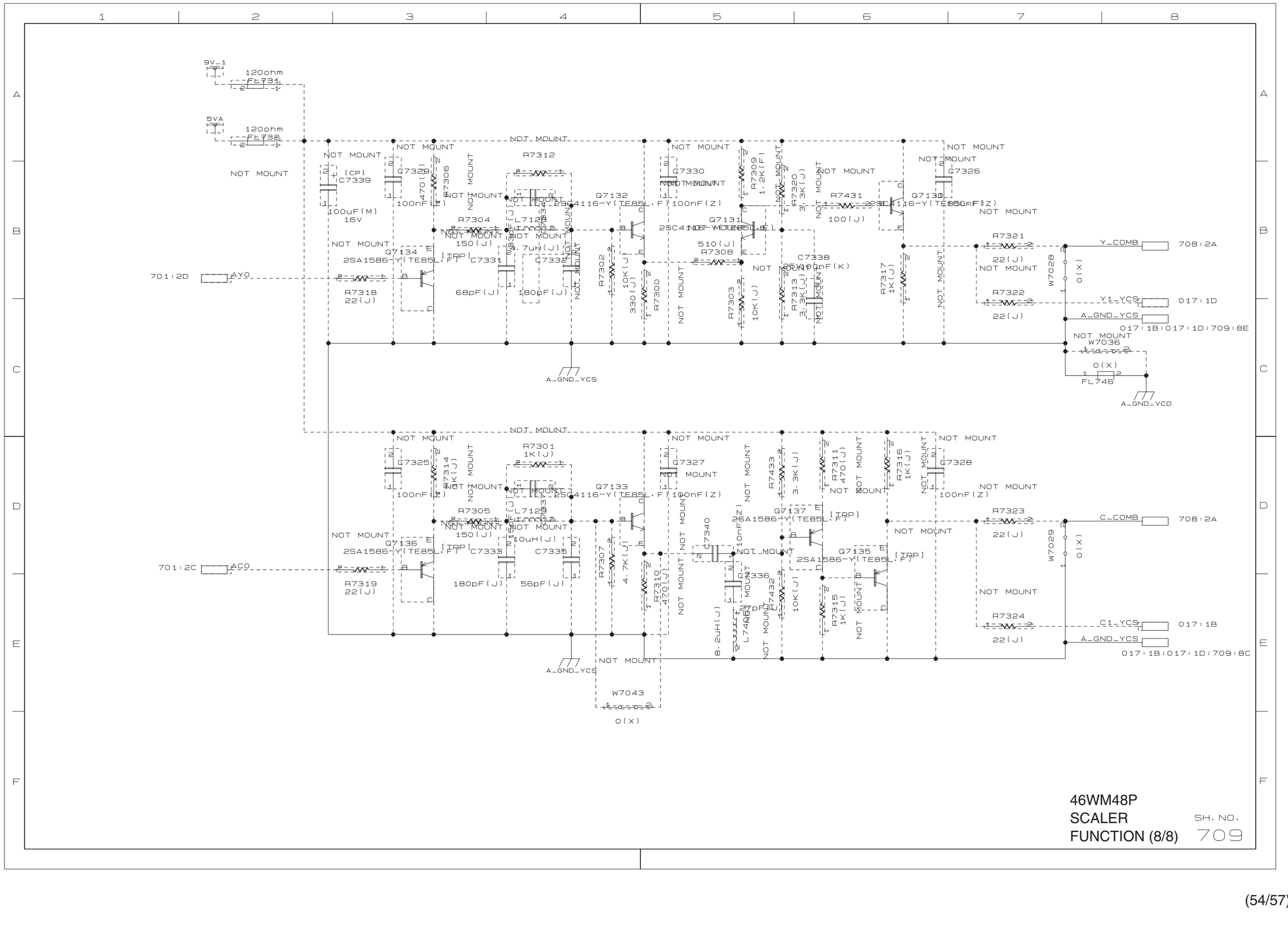
SH. NO.
706



46WM48P
SCALER
FUNCTION (6/8)

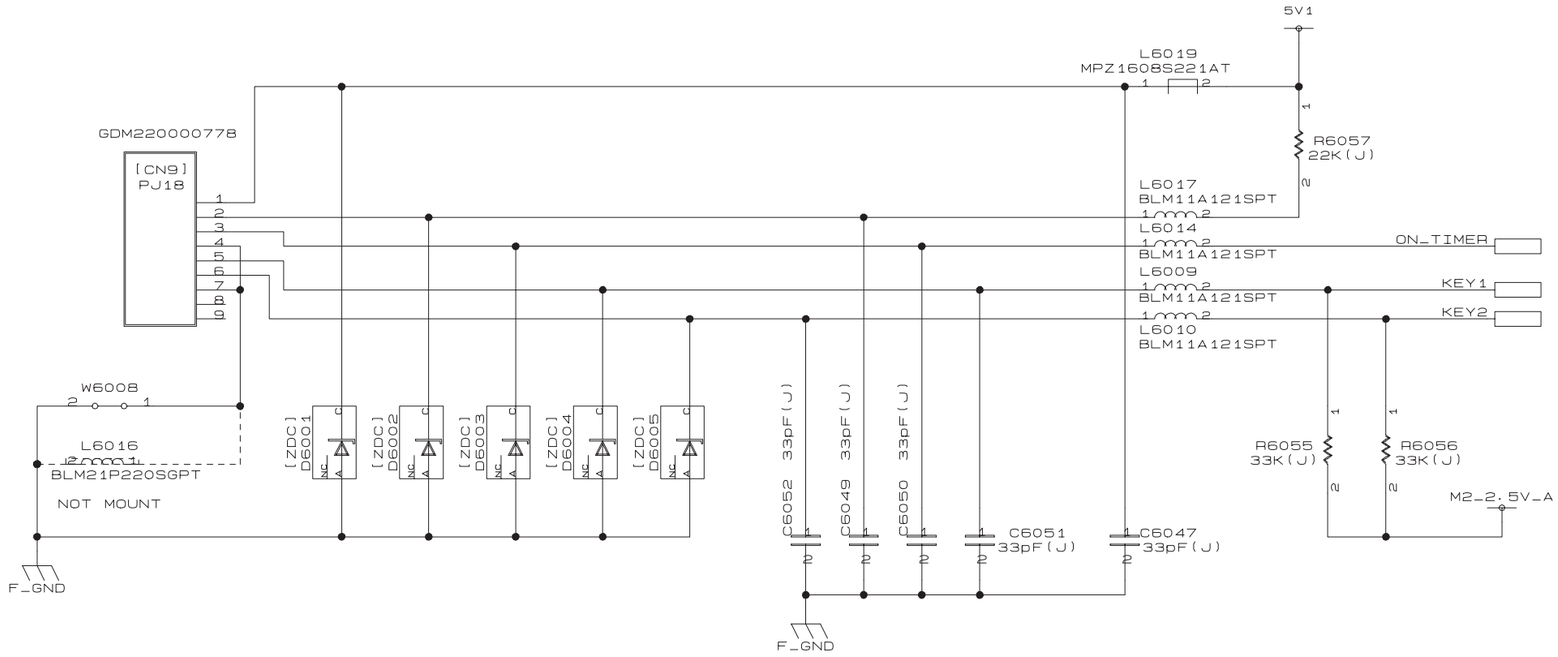
SH. NO.
707


[L3230DA]
IC779
SCL
SDA
RESQ
I2CSEL
CIN
VIN1
VIN2
VIN3
VIN4
B1/CB1IN
G1/Y1IN
R1/CR1IN
B2/CB2IN
G2/Y2IN
R2/CR2IN
TEST
YCOEQ
FB1IN
NC
NC
VOUT
Y7
Y6
Y5
Y4
Y3
Y2
Y1
Y0
C7
C6
C5
C4
C3
C2
C1
C0
INTLC
AVO
FPDAT
[CLOCK]
XTAL1
XTAL2
CLK20
LLC1
LLC2
CLK5
[FIFO CTL]
FFIE
FFWE
FFRSTW
FFRE
FFOE
[SYNC]
VGAV
FSY/HC
MSY/HS
VS
ASGF
ASGF
VSUPCAP
GNDCAP
GNDPA
VSUPPA
VSUPD
VSUPLLC
VSUPY
VSUPC
VSUPSY
VSTBY
VSUPF
VSUPAI
VRT
VREF
GNDD
GNDLLC
GNDY
GNDC
GNDSY
GNDF
GNDAI
AISGND
ISGND
W7017
W7020
W7018
W7019
W7016
W7040
W7041
W7042
R7280
R7292
R7290
R7507
R7286
R7287
C7313
C7297
C7296
C7426
C7427
C7293
C7317
C7318
C7419
C7298
C7299
C7304
C7321
C7306
C7341
C7322
C7323
C7308
C7312
C7291
C7294
C7316
C7315
C7320
C7295
C7292
C7319
C7305
C7303
C7302
C7300
C7301
C7314
C7311
C7310
C7309
C7307
C7420
C7421
C7422
C7423
C7424
C7425
L7113
L7112
[L2D]
[X]
X7300
20.25MHz
FL733
FL724
FL734
FL736
FL735
FL738
FL737
FL727
FL725
RM731
RM730
RM727
RM728
RM729
[RMX4A]
TW_Y7
TW_Y6
TW_Y5
TW_Y4
TW_Y3
TW_Y2
TW_Y1
TW_YO
TW_C7
TW_C6
TW_C5
TW_C4
TW_C3
TW_C2
TW_C1
TW_CO
TW_VS
TW_HS
TW_DATACK
001:1C
001:1D
001:1F
001:1F:007:8D:028:4C
001:1F:028:4C
G36130144017
BLK 050:6E
BLK_GND 050:6E
VAL1
2A
5VA
3.3VS_1
A_GND_VCD
D_GND_VCD
F_GND
DVCD_RESET
C_COMB
SC
Y_COMB
CVBS
SCL1
SDA1
BL_E1_LPF
GR_E1_LPF
RD_E1_LPF
CB2_LPF
Y2_LPF
CR2_LPF
FB_E1_LPF
[ZD] D7109 UDZSTE-176.2B
[ZD] D7110
[ZD] D7101
[ZD] D7102
[ZD] D7103
[ZD] D7104
[ZD] D7105
[ZD] D7106
[ZD] D7107
[ZD] D7108
NOT MOUNT
10K(J)
O(X)
100(J)
270(J)
270pF(J)
3pF(C)
1uF(K)
47uF(M) 6V
3.3uH(M)
1 1.8
2 1.8
3 1.8
4 1.8
5 1.9
6 1.8
①
②
③
④
⑤
⑥
⑦
46WM48P
SCALER
FUNCTION (7/8)
SH. NO.
708

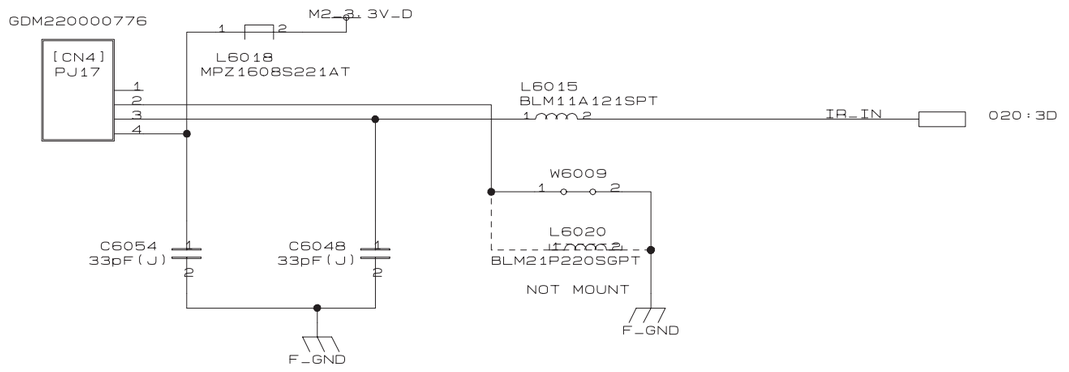


46WM48P
SCALER
FUNCTION (8/8)

SH. NO.
709

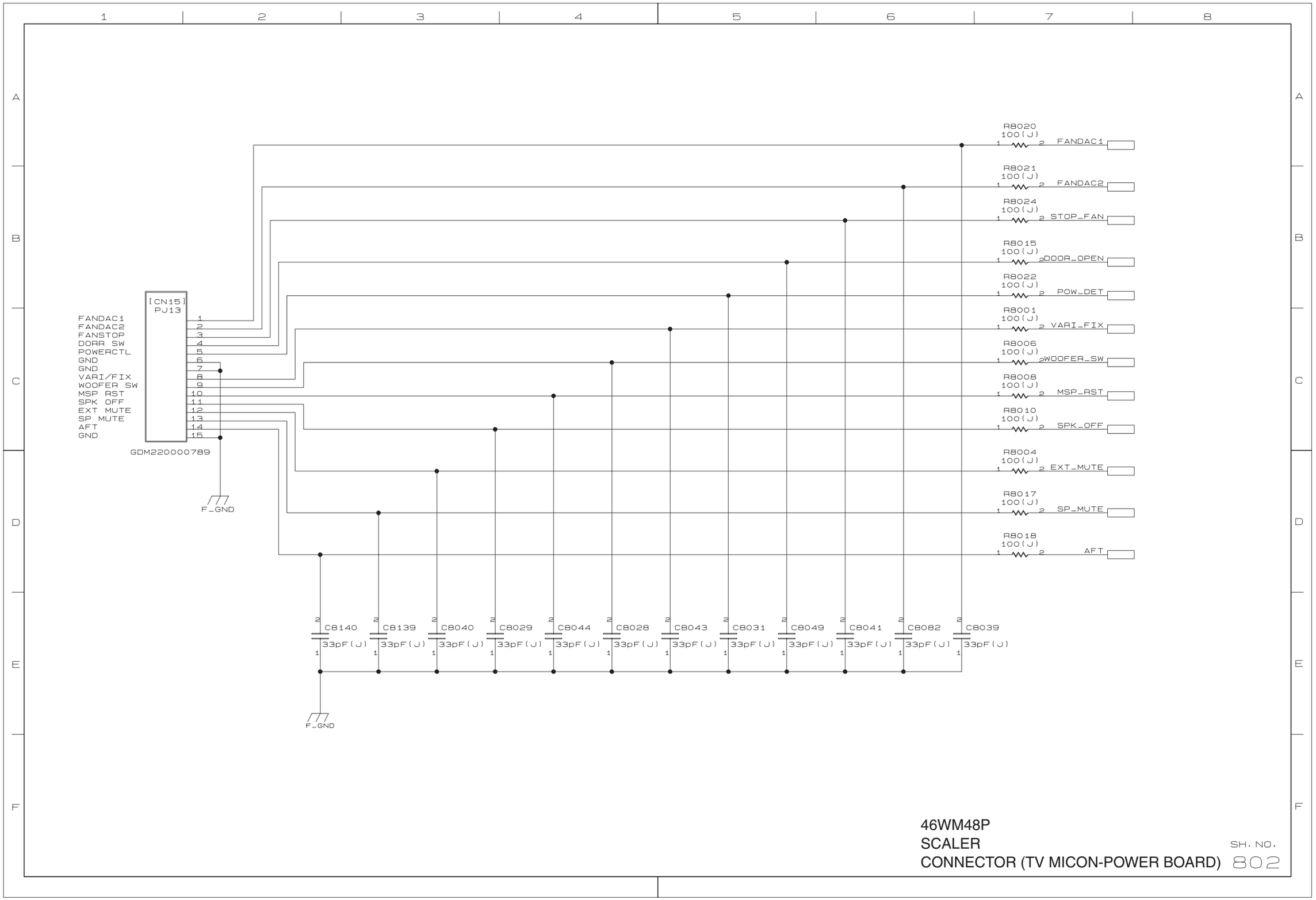


for remote I/F(TV MICON)



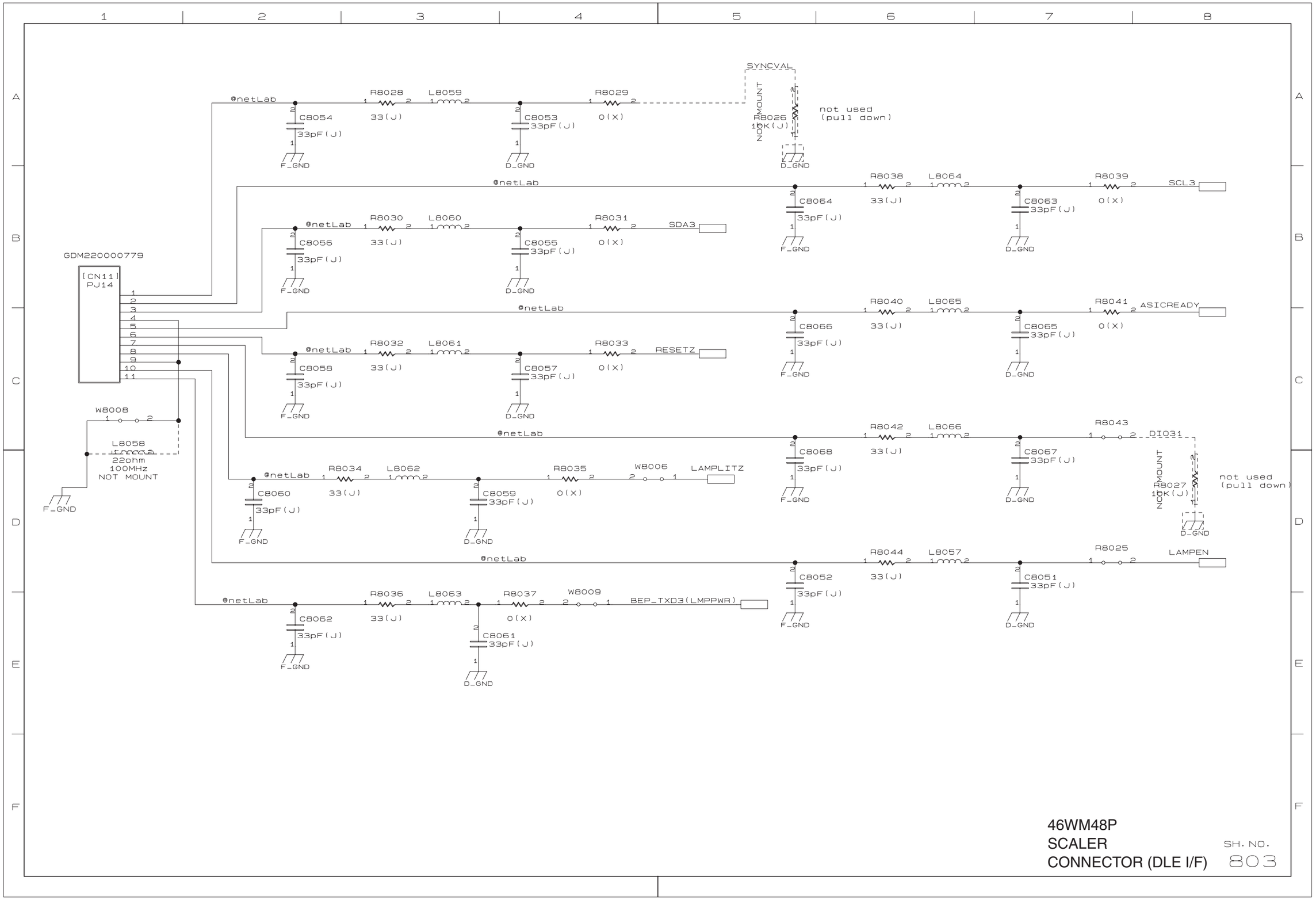
46WM48P
SCALER
TV MICON CONNECTOR (1)

SH. NO. 801



46WM48P
SCALER
CONNECTOR (TV MICON-POWER BOARD)

SH. NO.
802


SYNCVAL
@netLab
R8028
L8059
R8029
33(J)
0(X)
C8054
33pF(J)
C8053
33pF(J)
F_GND
D_GND
R8026
100K(J)
NOT MOUNT
not used
(pull down)
R8038
L8064
R8039
SCL3
C8064
C8063
R8030
L8060
R8031
SDA3
C8056
C8055
GDM220000779
[CN11]
PJ14
R8040
L8065
R8041
ASICREADY
C8066
C8065
R8032
L8061
R8033
RESETZ
C8058
C8057
W8008
L8058
22ohm
100MHz
NOT MOUNT
R8042
L8066
R8043
DI031
C8068
C8067
R8027
100K(J)
NOT MOUNT
not used
(pull down)
R8034
L8062
R8035
W8006
LAMPLITZ
C8060
C8059
R8044
L8057
R8025
LAMPEN
C8052
C8051
R8036
L8063
R8037
W8009
BEP_TXD3(LMPPWR)
C8062
C8061
46WM48P
SCALER
CONNECTOR (DLE I/F)
SH. NO.
803

SPECIFICATIONS

Broadcast systems/channels

PAL-I	UHF	UK21-UK69
PAL-B/G	UHF	E21-E69
	VHF	E2-E12, S1-S41
SECAM-L	UHF	F21-F69
	VHF	F1-F10, B-Q
SECAM-D/K	UHF	R21-R69
	VHF	R1-R12

Video Input PAL, SECAM, NTSC 3.58/4.43

External connections

EXT1	Input	21-pin SCART	RGB, A/V
EXT2	Input	21-pin SCART	RGB, A/V
EXT3	Input/Output	21-pin SCART	A/V, S-video Selectable output
EXT4	Input	Phono jacks	Y, P_B/C_B, P_R/C_R High definition 1080i Progressive scan
		Phono jacks	A/V
EXT5	Input (Side)	4 pin	S-video
		Phono jack	Video
		Phono jacks	Audio L + R
HDMI™	Input	HDMI connector	Digital television signal
PC	Input	Mini D-sub 15-pin	Analog RGB signal
	Input	3.5mm stereo jack	Audio
Audio Output Fixed/Variable		Phono jacks	Audio L + R
Output to Active Super Woofer		Phono socket	

Programme Positions 100

Stereo Nicam
2 carrier system

Visible Screen Size 46WM 46ins
(approx.) 52WM 52ins

Display 16:9

Sound output (at 10% distortion) Main 20W + 20W

Power consumption 46WM 195W
as specified in EN60107-1 : 1997 52WM 195W

Standby 46WM 2W
52WM 2W

Dimensions 46WM 81cm (H) 135cm (W) 39cm (D)
(approx.) 52WM 89cm (H) 149cm (W) 39cm (D)

Weight (approx.) 46WM 35kg
52WM 38kg

Headphone socket 3.5mm stereo

Accessories Remote control
2 batteries
(UM-4, AAA, IEC R03 1.5V)
Clip

– END –

TOSHIBA CORPORATION
1-1, SHIBAURA 1-CHOME, MINATO-KU, TOKYO 105-8001, JAPAN